CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, April 26, 1906.

CONTENTS.

Plans and Specifications on File 147
List of Contracts Pending 147
Railroads 148
Electric Railways 148
Light and Power Plants 148
Bridges 149
Buildings 150
Water Supply and Irrigation 151
Sewerage 151
Garbage Disposal 152
Streets and Roads 152
Manufacturing Plants 153
Miscellaneous Contracts 153
U. S. Possessions and Cuba 154
Foreign Contracts and Export News 154
Contract Prices 154-155-156
READERS' WANTS 154
CIVIL SERVICE EXAMINATIONS 155
INDUSTRIAL NOTES 156
PROPOSALS 157-158

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Apr.				
26	Engines	Philadelphia, Pa.	S.	3-22
28	Building	Portsmouth, N. H.	S.	3-29
28	Building	Charleston, S. C.	S.	3-22
*28	Power plant	Garden City, Kan.	S.	4- 5
28	Filling & gdng.	Charleston, S. C.	S.	4-12
*30	Dredging	Wilmington, Del.	S.	4-19
May				
*2	Telephone system	Salt Lake City, Utah	S. & B. S.	3-15
4	Wharf sheds & Rys.	Manila, P. I.	P. & S.	3- 1
4	Sewer construct'n.	Norwich, N. Y.	P. & S.	4-19
*7	Sanitary sewers	Plainfield, N. J.	P. S.& B. S.	4-26
*8	Tunnel	Boston, Mass.	P. & S.	4-19
8	Sewers	New Orleans, La.	P. & S.	3- 8
8	Barge canal	Albany, N. Y.	P. & S.	4-19
*10	Dam	Billings, Mont.	P. & S.	4- 5
*14	Caisson lock-gates	Boston, Mass.	S.	4-19
*14	Dredging	Detroit, Mich.	S.	4-19
*15	Bridges	Belle Fourche, S. Dak.	P. & S.	4-19
*15	Bridge	Philadelphia, Pa.	P. & S.	4-26
*15	Bridges	Niagara Falls, N. Y.	P. S. & B. S.	4-26
*24	Canal	Billings, Mont.	P. & S.	4-12
Sept.				
15	Hotel bldg.	Manila, P. I.	S.	3-29

*Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

Bids close.	Work.	Place.	On file.	See issue.
LIGHT, HEAT AND POWER PLANTS.				
Apr. 30	**Power plant for sale**	**Erindale, Ont.**		**Mar. 22**
	Advertised, Eng. News, Mar. 22 to Apr. 5.			
May 1	Electric plant	Madisonville, Ky.		Apr. 26
May 1	Electric light plant	Belleville, Kan.		Apr. 26
May 2	City lighting	Washington, D. C.		Apr. 26
May 2	Lighting	Washington, D. C.		Apr. 12
May 28	**Elec. power plant**	**Garden City, Kan.**		**Apr. 5**
	Advertised, Eng. News, Apr. 5 to May 10.			
June 13	Transmission poles	Chicago, Ill.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
July 5	Water power for sale	Kenora, Ont.		Mar. 15
	Advertised, Eng. News, Mar. 15.			
BRIDGES.				
Apr. 28	**Bridges**	**Garden City, Kan.**		**Mar. 29**
	Advertised, Eng. News, Mar. 29 to Apr. 19.			
Apr. 30	Iron draw-bridge	Belzona, Miss.		Mar. 15
	Advertised, Eng. News, Mar. 15 to Apr. 19.			
Apr. 30	Superstructure, etc.,	New York, N. Y.		Apr. 12
	Advertised, Eng. News, Apr. 12 to 26.			
Apr. 30	**Concrete bridge**	**Oakland, Cal.**		**Apr. 19**
May 2	**Steel bridge**	**Twickenham, Ore.**		**Apr. 19**
May 2	Rebuilding bridge	Salina, Pa.		Apr. 26
May 3	Steel bridge	Albert Lea, Minn.		Apr. 26
May 5	**Bridges**	**Grand Rorks, N. Dak.**		**Apr. 19**
May 7	**Bridge**	**Lawrence, Ind.**		**Apr. 12**
May 7	Bridge	Lakeport, Cal.		Apr. 26
May 7	Steel bridge	Aberdeen, Wash.		Apr. 26
May 7	Tube bridge	Rensselaer, Ind.		Apr. 26
May 12	Concrete bridge	Fresno, Cal.		Apr. 26
May 14	**Bridge cables for sale**	**Pawnee, Okla.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19 and 26.			
May 15	**Five bridges**	**Belle Fourche, S. Dak.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19 to May 10.			
May 15	Bridges	Niagara Falls, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 15	Bridge	Philadelphia, Pa.		Apr. 26
	Advertised, Eng. News, Apr. 26 to May 10.			
May 16	Steel bridge	De Smet, S. Dak.		Apr. 26
May 19	**Steel bridge**	**Souris, Man.**		**Apr. 19**
May 19	Highway bridge	San Juan, P. R.		Apr. 12
	Advertised, Eng. News, Apr. 12 to 26.			
May 22	Steel bridge	Alexandria, La.		Apr. 26
May 25	Bridge	Wilkes-Barre, Pa.		Apr. 26
June 30	**Bridges**	**St. John, N. B.**		**Apr. 12**
BUILDINGS.				
Apr. 26	School	Dayton, O.		Apr. 19
Apr. 27	High school	Chicago, Ill.		Apr. 26
Apr. 28	**Building**	**Charleston, S. C.**		**Mar. 22**
Apr. 28	**Building**	**Portsmouth, N. H.**		**Mar. 29**
Apr. 30	Hospital	Sheridan, Wyo.		Apr. 12
Apr. 30	Plumbing. House Office Building	Washington, D. C.		Apr. 12
	Advertised, Eng. News, Apr. 12 to 26.			
Apr. 30	Plumbing	Washington, D. C.		Apr. 12
	Advertised. Eng. News, Apr. 12 to 26.			
Apr. 30	School	New York, N. Y.		Apr. 26
May 1	**Barracks**	**Cheyenne, Wyo.**		**Apr. 5**
	Advertised, Eng. News, Apr. 5 to 26.			
May 1	**Elevator, fixtures, etc.,**	**Wash., D. C.**		**Apr. 5**
	Advertised, Eng. News, Apr. 5 to 26.			
May 1	**Court-house**	**Colby, Kan.**		**Apr. 19**
May 2	Addition, Central Islip (L. I.)	N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 3	**Hospital**	**Boston, Mass.**		**Apr. 12**
May 4	**Hospital**	**Prescott, Ariz.**		**Apr. 5**
	Advertised, Eng. News, Apr. 5 to 26.			
May 7	**High school**	**Rockford, Ill.**		**Apr. 19**
May 7	**School building**	**Athens, O.**		**Apr. 19**
May 8	**Court-house**	**Woodsfield, O.**		**Apr. 19**
May 8	Steel cell work	Cheyenne, Wyo.		Apr. 26
May 11	**Post-office and court-house**	**Los Angeles, Cal.**		**Apr. 12**
May 14	Court bldg, etc.,	White Plains, N. Y.		Apr. 19
	Advertised, Eng. News, Apr. 19 to May 10			
May 14	Court-house	Newton, Kan.		Apr. 26
May 15	Buildings	Spring City, Pa.		Apr. 26
May 15	**Jail**	**Folkestone, Ga.**		**Apr. 19**
May 16	Court-house and jail	Sanderson, Tex.		Apr. 26
May 18	Church	Auburn, N. Y.		Apr. 26
May 21	Jail	St. Peter, Minn.		Apr. 26
May 21	Army buildings	Laredo, Tex.		Apr. 26
May 22	Vacuum cleaner	San Francisco, Cal.		Apr. 26
June 7	Court-house	Peru, Ind.		Apr. 26
Sept. 15	**Hotel**	**Manila, P. I.**		**Mar. 29**
WATER SUPPLY AND IRRIGATION.				
Apr. 26	**Pumping engine**	**Bowling Green, Ky.**		**Apr. 12**
Apr. 26	Reservoir	Indiana, Pa.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 26	**Engines, etc.,**	**Philadelphia, Pa.**		**Mar. 22**
	Advertised, Eng. News, Mar. 22 and 29 and Apr. 19.			
Apr. 26	**Pumping engine**	**Bowling Green, Ky.**		**Apr. 5**
	Advertised, Eng. News, Apr. 5 to 19.			
Apr. 26	Pipe and furnishings	Melrose, Mass.		Apr. 19
Apr. 27	Pumps	Cincinnati, O.		Apr. 5
Apr. 27	Water-works supplies	Pittsburg, Pa.		Apr. 26
Apr. 28	Water-works	Asbury Park, N. J.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 28	Furnishing 200 tons of 12-in. c.-i. water pipe	Washington, D. C.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 30	**Water-works**	**Buena Vista, Ga.**		**Apr. 12**
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 30	Water-works plant	Muskegon, Mich.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
Apr. 30	Pumping machinery	Pleasantville, N. Y.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
Apr. 30	Water system	Mayville, Wis.		Apr. 26
May 1	Water meters	Bayonne, N. J.		Apr. 19
	Advertised, Eng. News, Apr. 19.			
May 1	Deep well	Waterloo, Ia.		Apr. 19
May 1	Water-works improvement	Cincinnati, O.		Apr. 5
	Advertised, Eng. News, Apr. 12 and 19.			
May 1	**Well**	**Waterloo, Ia.**		**Apr. 5**
May 1	**Drilling deep well**	**Waterloo, Ia.**		**Mar. 29**
	Advertised, Eng. News, Mar. 29 and Apr. 5.			
May 1	**Water pipe**	**Toronto, Ont.**		**Mar. 29**
	Advertised, Eng. News, Mar. 29 to Apr. 12.			
May 2	Boiler, pump, etc	Dawson, Ga.		Apr. 26
May 2	Pumping station	New York, N. Y.		Apr. 26
May 4	Water system	Cape May, N. J.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 7	**Pipe laying**	**Perrysburg, O.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19.			
May 8	Head house, etc.,	Cincinnati, O.		Apr. 26
May 15	**Water pipe**	**New Orleans, La.**		**Apr. 5**
May 18	Stand-pipe	Chatham, Va.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 21	Infiltration gallery	Columbus, Ind.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
No date	Excavating for lake	Central Valley, N.Y.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
SEWERAGE.				
Apr. 27	Sewers	McCook, Neb.		Apr. 12
	Advertised, Eng. News, Apr. 12.			
Apr. 28	Pipe sewers	Gadsden, Ala.		Apr. 19
	Advertised, Eng. News, Apr. 19.			
Apr. 30	Sluice gates	Washington, D. C.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
Apr. 30	Sewage disposal plant	Far Rockaway, N. Y.		Apr. 19
Apr. 30	Sewer system	Ontario, Ore.		Apr. 26
Apr. 30	Sewer	Painesville, O.		Apr. 26
May 1	Sewer extension	Champaign, Ill.		Apr. 26
May 1	**Sewers**	**Springfield, Mo.**		**Apr. 12**
May 2	**Sewers**	**Milledgeville, Ga.**		**Apr. 12**
May 2	Sewers	Fort Sam Houston, Tex.		Apr. 26
May 2	Pipe sewers, etc.,	Altoona, Pa.		Apr. 26
May 4	**Sewer**	**Jacksonville, Fla.**		**Apr. 19**
May 4	Sewerage	Norwich, N. Y.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
May 8	Sewers	New Orleans, La.		Mar. 8
	Advertised, Eng. News, Mar. 8 to May 3.			
May 8	Sewers	Jacksonville, Ill.		Apr. 26
May 8	Sewer construction	Belleville, Ill.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 9	Storm sewers, etc.,	Altoona, Pa.		Apr. 26
May 11	Sewers	Elkhart, Ind.		Apr. 26
May 12	Sewers, Pipestone	Minn.		Apr. 26
May 12	**Sewers**	**Pittsburg, Pa.**		**Apr. 12**
May 14	Sewer	Oshkosh, Wis.		Apr. 26
May 15	Sewer construction, etc.,	Ravenna, O.		Apr. 26
June 26	Sewer	Vacaville, Cal.		Apr. 5
No date	Sewer	Pueblo, Colo.		Apr. 19
STREETS AND ROADS.				
Apr. 26	**Roads**	**Rensselaer, Ind.**		**Apr. 12**
Apr. 27	**Sidewlk & curbing**	**Le Seur Center, Minn.**		**Apr. 12**
Apr. 28	**Grading, etc.,**	**Charlestown, S. C.**		**Apr. 12**
Apr. 28	**Pavement**	**South Bend, Ind.**		**Apr. 19**
Apr. 28	**Curbs and gutters**	**Ogden, Utah**		**Apr. 19**
Apr. 30	**Paving, etc.,**	**Atlantic City, N. J.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19.			
Apr. 30	**Resurfacing**	**Sacramento, Cal.**		**Apr. 19**
Apr. 30	Grading, etc.,	New York, N. Y.		Apr. 19
Apr. 30	**Street improvements**	**Kokomo, Ind.**		**Apr. 19**
Apr. 30	Repaving	Great Falls, Mont.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 30	Grading, etc.,	Des Plaines, Ill.		Apr. 26
May 1	Street improvements	Dayton, O.		Apr. 26
May 1	Paving	Zanesville, O.		Apr. 26
May 1	Paving	Kansas City, Kan.		Apr. 26
May 1	**Paving**	**Evansville, Ind.**		**Apr. 12**
May 1	**Sidewalks**	**St. Paul, Minn.**		**Apr. 12**
May 1	**Gravel streets**	**Springfield, Mo.**		**Apr. 12**
May 1	**Repair pavements**	**Buffalo, N. Y.**		**Apr. 19**
May 2	Road improvement	East Hampton, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 2	Road construction	Richmond, Ind.		Apr. 26
May 5	Gravel road	Colebrook, N. H.		Apr. 26
May 6	Brick paving	Urbana, Ill.		Apr. 26
May 7	Paving, etc.,	Montgomery, Ala.		Apr. 26
May 7	Reducing grade	Watsonville, Cal.		Apr. 26
May 7	Brick paving	Ottumwa, Ia.		Apr. 26
May 7	Gravel roads	Rockville, Ind.		Apr. 19
May 7	**Paving & curbing**	**Portsmouth, Va.**		**Apr. 12**
	Advertised, Eng. News, Apr. 12 and 19.			
May 8	**Road construction**	**Boston, Mass.**		**Apr. 12**
May 8	**Macadamized roads**	**Vincennes, Ind.**		**Apr. 12**
May 8	**Road**	**Brazil, Ind.**		**Apr. 12**
May 8	Macadam roads	Princeton, Ind.		Apr. 19
May 8	Gravel roads	Versailles, Ind.		Apr. 19
May 8	Macadam road	Versailles, Ind.		Apr. 19
May 8	Macadam road	Madison, Ind.		Apr. 19
May 9	Stone paving	Woonsocket, R. I.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 11	**Grading, paving, etc.,**	**Suffolk, Va.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19 and 26.			
May 12	Paving	Westerville, O.		Apr. 26
No date	Paving material	Phoebus, Va.		Apr. 19
No date	Paving	Nashville, Tenn.		Apr. 19
No date	Sidewalks	Oberlin, Kan.		Mar. 29
MISCELLANEOUS CONTRACTS.				
At once	Excavating for lake	Central Valley, N.Y.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
Apr. 26	Tram track and cars	Philadelphia, Pa.		Apr. 19
	Advertised, Eng. News, Apr. 19.			
Apr. 27	Tugboat supplies	Panama		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 28	Ditches	Crawfordsville, Ind.		Apr. 19
Apr. 28	Cement, Wheeling, W. Va.			Apr. 5
	Advertised, Eng. News, Apr. 5 to 26.			
Apr. 28	Drainage	Bergenfield, N. J.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 28	Filling and grading	Charleston, S. C.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
Apr. 30	Dredging	Wilmington, Del.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
Apr. 30	Filling-in	New York, N. Y.		Apr. 26
May 1	Street sprinkling	Albany, N. Y.		Apr. 26
May 1	Removing ashes, etc.,	Albany, N. Y.		Apr. 26
May 1	Ditch	Findlay, O.		Apr. 12
May 1	R. R. grading, bridging, etc.,	Kanawha & West Va. R. R.		Apr. 12
	Advertised, Eng. News, Apr. 12 to May 3.			
May 1	Dredging	Butler, Mo.		Apr. 12
	Advertised, Eng. News, Apr. 12 to 26.			
May 1	Steel dock	Chile (Foreign)		Nov. 9
May 2	Telephone system	Salt Lake City, Utah		Mar. 15
	Advertised, Eng. News, Mar. 15 to Apr. 5.			
May 2	Revetments	Chicago, Ill.		Apr. 5
	Advertised, Eng. News, Apr. 5 to 26.			
May 2	Steel tug	Duluth, Minn.		Apr. 5
	Advertised, Eng. News, Apr. 5 to 26.			
May 4	Wharf sheds & Rys.	Manila, P. I.		Mar. 1
	Advertised, Eng. News, Mar. 15 to 29.			
May 7	Iron fence	Prescott, Ariz.		Apr. 12
	Advertised, Eng. News, Apr. 12 and 19.			
May 7	Street cleaning	Washington, D. C.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
May 8	Hire of dredging plants	New York, N. Y.		Apr. 12
	Advertised, Eng. News, Apr. 12 to May 3.			
May 8	Dredging	New York, N. Y.		Apr. 12
	Advertised, Eng. News, Apr. 12 to May 3.			
May 8	Tunnel	Boston, Mass.		Apr. 19
	Advertised, Eng. News, Apr. 19 to May 3.			
May 8	Barge canal	Albany, N. Y.		Apr. 19
May 8	Sprinkling	New York, N. Y.		Apr. 26
May 9	Barge canal	Albany, N. Y.		Apr. 19
May 10	Dikes	New York, N. Y.		Apr. 12
	Advertised, Eng. News, Apr. 12 to May 3.			
May 10	Dam	Billings, Mont.		Apr. 5
	Advertised, Eng. News, Apr. 5 to 26.			
May 13	Pig lead	Youngstown, O.		Apr. 26
	Advertised, Eng. News, Apr. 26.			
May 14	**Caisson lock-gates**	**Boston, Mass.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19 and 26.			
May 14	**Dredging**	**Detroit, Mich.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19 to May 10.			
May 21	Stone breakwater	Buffalo, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 to May 17.			
May 22	Vacuum cleaning	San Francisco, Cal.		Apr. 19
	Advertised, Eng. News, Apr. 19 and 26.			
May 23	Dredging	New York, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 to May 17.			
May 24	Canal	Billings, Mont.		Apr. 12
	Advertised, Eng. News, Apr. 12 to May 10.			
May 24	**Subway**	**Auburn, N. Y.**		**Apr. 19**
	Advertised, Eng. News, Apr. 19.			
May 28	**Lock and dam**	**Dallas, Tex.**		**Apr. 12**
	Advertised, Eng. News, Apr. 12 & 19 and May 7 & 24.			
May 29	Main canal	Belle Fourche, S. Dak.		Apr. 26
	Advertised, Eng. News, Apr. 26 to May 17.			
June 2	Two battleships	Washington, D. C.		Apr. 5
June 6	Dredging plant	Cuba		Apr. 5
	Advertised, Eng. News, Apr. 5 to May 31.			
June 27	Storage works	Portland, Ore.		Apr. 26
	Advertised, Eng. News, Apr. 26 to May 10.			
Sept. 4	Railway supplies	Siam (Foreign)		Apr. 26
No date	Electric railway	La Salle, Ill.		Apr. 12
CIVIL SERVICE EXAMINATIONS.				
May 2	**Engr. Draftsman**	**Wheeling, W. Va.**		**Apr. 5**
May 2	**Elec. Assistant**	**Washington, D. C.**		**Apr. 5**
May 3	**Asst. Elec. Engr.**	**California**		**Apr. 5**
May 9	Nautical Expert	Washington, D. C.		Apr. 12
May 12	Asst. Sanitary Engr.	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 12	Bridge Draftsman	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 12	Consult. Sanitary Engr.	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 14	Heliotroper	New York, N. Y.		Apr. 19
	Advertised, Eng. News, Apr. 19.			
May 16	Draftsman	Washington, D. C.		Apr. 19
May 16	Engineer	Miller, Arizona		Apr. 19
May 16	Linotype Machinist	Philippine Service		Apr. 19
May 19	Nautical Expert	Washington, D. C.		Apr. 19
May 26	Asst. C. E.	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 26	Bridge Designer	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 26	C. E. Draftsman	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 26	Jr. Bridge Draftsman	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			
May 26	Leveler	Albany, N. Y.		Apr. 26
	Advertised, Eng. News, Apr. 26 and May 3.			

PROPOSED WORK

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

Address, **WAINWRIGHT RANDALL**
Editor Construction News

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ARKANSAS.—Ray Underwood, of Stuttgart, Ark., who was previously noted as being interested in the proposed construction of a railroad from Stuttgart to Hazen, 18 miles, advises us that good grade was secured between these points, but that right-of-way has reverted to the property owners, but could be easily obtained again, with bonus.

ARKANSAS, ANTHRACITE & WESTERN.—This company has been granted a charter in Arkansas to build a railroad from Fort Smith, through Sebastian, Franklin and Logan Counties, to Prairie View, 65 miles. Capital stock, $2,500,000. Directors: R. L. Remmel, F. W. Tucker, Charles McKee, J. F. Loughborough, George Heim and R. B. Chitwood, of Fort Smith.

BOISE, THUNDER MOUNTAIN & BIG CREEK.—V. M. Wiel, Pres., 7 Water St., Boston, Mass., is reported to have stated that this company, recently chartered, will build a railroad from Boise to Roosevelt, Idaho, 176 miles, via Pearl, Sweet Airha, Transfer, High Valley, Long Valley, Knox and Fern. The line is under survey. It is expected to begin the work of construction in June or July. G. W. Fletcher, Boise, Idaho, is Treas.; I. A. Bullard, 7 Water St., Boston, is Ch. Engr.

BOSTWICK R. R.—A charter has been granted to this company, in Georgia, to build a line from Bostwick to Appalachee, Ga., six miles, connecting there with the Central of Georgia Ry. W. B. Thomas, of Atlanta, Ga., will begin the survey and location at once. The incorporators are John Bostwick and R. R. Jones, of Bostwick, Ga.

CONTINENTAL TRANSPORTATION CO.—Henry M. Crowther, Pres., Salt Lake City, Utah, advises us that this company will rebuild the line from Bingham Junction to Alta, Utah, with its own forces.

CALIFORNIA & OREGON COAST.—Contract for building the first 15 miles of this railroad from Grants Pass, Ore., has been awarded to the PACIFIC COAST CONSTRUCTION CO., of San Francisco. Work is to begin at once, it is said. The road is projected from Grants Pass to Crescent City, Cal., 91 miles, of which 45 miles are in Oregon. J. O. B. Gunn is Pres., and T. W. M. Draper, Gen. Mgr., both of San Francisco.

CENTRAL RAILWAY OF OREGON.—Alonzo Cleaver, Pres., Union, Ore., states that this company proposes to build a railroad from Union, via Cove, La Grande and Island City, to Summerville, Ore., with a spur to Hot Lake, a total distance of 45 miles. The line has been surveyed and grading has been commenced. The OREGON CONSTRUCTION CO., of 56 and 58 Pine St., New York, is reported to have the contract. The road will be operated by steam the first year and will be electrified later. Arthur B. Browne, Union, Ore., is Ch. Engr.

CHERRYVALE, OKLAHOMA & TEXAS.—The W. R. STUBBS CONSTRUCTION CO., of Kansas City, Mo., has been awarded the contract for building 215 miles of this road from Caney to Kingfisher, Okla. The road is projected from Caney to El Paso, Tex., 900 miles. S. M. Porter is Pres., Caney, Kan.

FRANKLIN & SOUTHWESTERN.—Company has been incorporated in Georgia to build a railroad from Franklin to a connection with the Atlanta & West Point R. R., at La Grange or some other point in Troup County, about 21 miles. Incorporators: James S. Wright, A. J. Crovatt, Albert Fendig, Bolling Whitfield, William Nussbaum, Benito Padrosa, N. W. Walker, and J. Y. Brame, of Brunswick, Ga.; Edwin Brobston, of Jacksonville, Fla., and C. W. Deming, of La Grange, Ga.

GALVESTON, BEAUMONT & NORTH-EASTERN.—We are officially advised that surveys are made and right-of-way secured for the proposed line from Beaumont northeast, about 100 miles long. 15 miles are now under construction. A. W. Miller is Pres. and R. W. Luttrell is Ch. Engr., both at Galveston, Tex.

GAINESVILLE, WHITESBORO & SHERMAN.—The GENERAL CONSTRUCTION CO., of Atlanta, Ga., N. B. Pratt, Pres., has the contract to build the proposed Gainesville, Whitesboro & Sherman Railway, 35 miles long, in Texas.

JACKSONVILLE, FERNANDINA & WESTERN.—This company has made application for a charter in Florida to build a railroad from Jacksonville, via Fernandina, to Saint Marys, Ga., a distance of 40 miles in the state of Florida. Capital stock, $100,000. Officers and incorporators: President, A. Sessoms, of Waycross, Ga.; First Vice-Pres., W. M. Toomer, of Jacksonville, Fla.; Second Vice-Pres., John McLean, of Douglass, Ga.; Secy., Dan Lott, of Waycross, Ga.; Treas., Arthur T. Williams, of Jacksonville, Fla.

LOUISVILLE, SOUTH PITTSBURG & BIRMINGHAM.—Incorporated in Tennessee to build a railroad from Louisville, Ky., to Birmingham, Ala. Capital stock, $100,000. Incorporators: C. G. Glatzan and Edwin Ripley, of Pittsburg, Pa.; J. W. Davis, of Falconer, N. Y.; Earl Ripley, of Duquoin, Ill.; W. H. Waugh, of Greenville, Pa., and John A. Shillito, of Crossville, Tenn.

LEHIGH VALLEY.—The contract for building an extension from East Buffalo to the Lehigh & Lake Erie, a distance of six miles, has been awarded to F. D. HYDE & CO., 5 East 42d St., New York. This extension will be an elevated line and will also connect with the South Buffalo Railroad.

MARIETTA & LAKE.—We are officially informed that surveys were started April 15 for the new Marietta and Lake R. R. The line begins at Jewett, O., connecting with the Pittsburg, Cincinnati, Chicago & St. Louis Ry. and Wabash R. R. companies and runs south, via Freeport on the C. L. & W., Lore City on the B. & O., to Marietta on the Ohio River, with an extension from McCleary's via Caldwell, McConnelsville and Logan to Chillicothe, making a short connecting route from Pittsburg to Cincinnati. Part of the line will lie upon the old "Calico" grade. Officers of the road are: W. H. Young, Pres.; A. McEdward Ball, Vice-Pres.; Robt. A. Davis, Secy.-Treas.; John Moffitt, Genl. Counsel, all of Chicago. Ray S. Blinn, of Mt. Vernon, O., formerly Assistant Engr. with the Illinois Central, is in charge of surveys.

MINNESOTA TRANSFER RY. — This company, it is announced, will spend $200,000 in constructing five new tracks and in better equipping the Midway railway transfer district at St. Paul, Minn. E. D. Sewall is Pres., Minneapolis, Minn. M. J. Dooley is Supt., at St. Paul.

MICHIGAN CENTRAL.—We are advised by Maxwell K. Moorhead, American Consul, at St. Thomas, Ont., that the Michigan Central R. R. is soon to double-track its line from Tilbury to Bridgetown, Ont. This company will build a subway under its tracks in St. Thomas. G. H. Webb is Ch. Engr., at Detroit, Mich.

McCLOUD RIVER R. R.—S. O. Johnson, Mgr., McCloud, Cal., informs us that company's forces will build proposed extension from Bartle to Laird, Cal., about 45 miles long. Good progress made in securing right-of-way and in surveys. C. Z. Vander-Horck is Ch. Engr., McCloud.

NORFOLK & SOUTHERN.—The New York "Tribune," on April 22, published the following item: "Plans are being perfected for the organization of a corporation to be known probably as the Norfolk & Southern Ry. Co., which will acquire the property of the Norfolk & Southern R. R. Co., the Virginia & Carolina Coast R. R. Co., the Pamlico, Oriental & Western R. R. Co., and the Raleigh & Pamlico Sound R. R. Co. The new company purposes to construct an extension of about 200 miles of standard gage road, bridging Albemarle Sound and making a connected system of about 600 miles, which will traverse in great part its own land and timber holdings. It intends also to increase its lumber plants so that the annual output will be at least 150,000,000 ft. The authorized capitalization of the new company will be $25,000,000 first mortgage and refunding 50-year 5% bonds. $5,000,000 5% non-cumulative preferred stock and $20,000,000 common stock. Of the bonds, $3,500,000 will be issued to provide for retirement of all outstanding liens and $14,000,000 underwritten to provide in part for acquirement and in full for construction. There will also be issued $4,800,000 preferred stock to provide for acquirement and construction and $12,700,000 common stock provided as compensation for underwriting and to conclude acquirement. Edward Sweet & Co., 17 Nassau St., are syndicate managers under the underwriting agreement."

NORTHERN PACIFIC.—DALE & BUMGARDNER, of St. Paul, Minn., have been awarded contracts for constructing double-track from Perham to Oak Lake, via Frazee.

PITTSBURG, BINGHAMTON & EASTERN.—This company will build its first 50 miles of railroad between Towanda and the Pennsylvania coal fields with its own forces, under H. C. Ferris, Gen. Supt., at Binghamton, N. Y.

QUEBEC & LAKE HURON.—We are officially informed that preliminary surveys are made for this line, from Quebec to port of French River on Georgian Bay. Contract for building the line has been awarded to ROBERT T. CAMPBELL, the Belleclaire Hotel, New York, who has transferred it to JAMES P. McDONALD, 42 Broadway, New York. George Cornell, New York, is Ch. Engr. Hon. D. Turgeon is Pres., at Quebec, Que.

SOUTHERN PACIFIC. — Advices have been received at the office of the U. S. Reclamation Service, Washington, D. C., that the Southern Pacific R. R. Co. will immediately extend its line from Hazen to Fallon, Nev. This is an important move, as it will furnish needed transportation for the material and supplies of the government to be used in the construction of the Truckee-Carson Project, and later will afford an outlet for the surplus products of the new settlers who are rapidly occupying this region.

TENNESSEE & NORTH CAROLINA.—An extension from Waterville to Canton, N. C., 23 miles, has been authorized. Contracts are to be let soon, according to a press report. J. B. Hart is Pres., Clarkesburg, W. Va.; P. T. Bauman is Supt., Newport, Tenn.

TOMBIGBEE VALLEY.—The capital stock of this company, operating a road from Farford to Penny Mill, Ala., 43 miles, has been increased from $150,000 to $800,000. The increased capital, it is said, is to be used in improvements which include a line to connect with the Carrollton Short Line. John T. Cochrane is Pres., of both companies, at Aliceville, Ala.

TEXAS RY.—David M. Duller, Engr., 325 Commercial Bank Bldg., Houston, Tex., writes us that he desires quotations on all railroad materials. Mr. Duller is at work on plans and specifications for the proposed line from Port O'Connor to New Braunfels, Tex., with branches, aggregating about 260 miles. This project was fully noted in issue of April 5.

WOLFE, LOTBINIERE & MEGANTIC.—We are officially advised that this company will amalgamate with the Lotbiniere & Megantic Ry. and expects to commence construction on its line from Lyster Station, Que., to Lime Ridge. Right-of-way is partly secured. The road will be about 100 miles long. W. G. ORCUTT, of Boston, Mass., is said to have contract. W. H. Lamby, of Inverness, Que., is Secy. Samuel Jamieson, Jamieson, Ont., is Pres.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

DUNKIRK, N. Y.—Application for a local belt line franchise has been made to Common Council by the recently incorporated Dunkirk St. Ry. Co. A public hearing will be given on May 7th.

HARRISBURG, PA.—A charter has been granted to the White Deer & Loganton Railroad Co. to build a line from Duncan, Union County, Pa., to Loganton, Clinton County, Pa., a distance of ten miles. Capital, $100,000. Charles Steele, Northumberland, Pa., is Pres.

A charter has been granted to the Valley Forge Railroad Co. to build a line from Gladwyne, Montgomery County, to Valley Forge, Chester County, Pa., a distance of 15 miles. Capital, $150,000. L. Knowles Perot, Philadelphia, is Pres.

TOLCHESTER BEACH, MD.—We are officially advised that right-of-way is partly secured and also part of capital for construction of the Kent Traction Co.'s line. Contracts will be let as soon as capital is obtained. The proposed railway will run from Tolchester to Chestertown, Rockhall and Fairlee. Alva A. Lamkin, 611 Equitable Bldg., Baltimore, Md., is Secy.

HAGERSTOWN, MD.—A company has been formed at Hagerstown, Md., to build a trolley line from Greencastle to Mercersburg, a distance of 15 miles. The following officers were elected: Pres., T. M. Nelson; First Vice-Pres., Geo. B. Beaver; Second Vice-Pres., A. N. Pomeroy; Secy., H. B. McNulty; Treas., Joseph Sierer. Directors: Dr. David Maclay, A. Buchanan, Milton K. Burgner, Capt. Geo. W. Skinner, Samuel G. Greenawalt, W. L. Minnick, Dr. R. W. Ramsay, H. B. McNulty, G. Howard Wolfinger, all of Chambersburg; J. J. Oller, D. M. Good, J. W. Warehine, J. MacWolff, D. M. Wertz, M. E. Sollenberger, all of Waynesboro. The company is capitalized at $500,000. The new railway will be connected with the Greencastle and Pen-Mar electric railway, now in operation, and it is expected that cars will be running to Mercersburg by next fall. It is likely that the road will be eventually extended from Mercersburg to Stony Battery and McConnellsburg, in Fulton County.

LUTHERVILLE, MD.—James S. Nussear, Secy. and Treas. of the Towson & Cockeysville Electric Railroad Co., states that a preliminary survey has been made for the line, which will be about seven miles long, from Towson via Lutherville, Timonium, Texas and Cockeysville to Marble Hill. J. Alexis Shriver, of Belair, Md., is Pres.; W. H. Wight, of Cockeysville, Md., Vice-Pres.; James S. Nussear, of Lutherville, Md., Secy. and Treas.

NORFOLK, VA.—The Willoughby Bay Traction Co. will build a line from Ocean View to the Jamestown Exposition grounds at Pine Beach. H. L. Smith is Pres., at Norfolk.

J. E. West, Pres., states that the Pine Beach Miniature Corporation proposes to build a line from the steamboat pier at Pine Beach to the grounds of the Jamestown Exposition. Including loops, the road will be about two miles long. The railroad company will do its own construction work. J. J. Thomas is Secy., Newport News, Va.; George W. Hatch, Treas., Norfolk, Va.; L. P. Stearns and B. J. Megginson, Directors, Newport News, Va.

NORFOLK, VA.—In connection with the Norfolk & Portsmouth Traction Co. merger, noted on April 26, it is announced that improvements on the lines will be made at an early date. At least $1,000,000 may be expended in the erection of a power-house at some point convenient to the various lines, and new equipment will be purchased to provide for the expected rush of traffic during the Jamestown Exposition. The following are the officers of the Norfolk & Portsmouth Traction Co.: R. Lancaster Williams, of Richmond, Pres.; Caldwell Hardy, of Norfolk, First Vice-Pres.; G. M. Serpell, of Norfolk, Second Vice-Pres.; W. J. Kehl, Secy. and Treas.; E. C. Hathaway, of Norfolk, Gen. Mgr. The companies which recently voted to merge their properties were as follows: The Norfolk Railway & Light Co., the Norfolk, Portsmouth & Newport News Co., the Old Dominion Ry. Co., the Berkley Street Ry. Co., the Norfolk, Portsmouth & Berkley ferries, the Suffolk Light & Ice Co., and the lighting plants of Norfolk and Portsmouth. The capitalization of the consolidated companies aggregates an investment of $14,000,000. There will be issued immediately $6,000,000 in stocks and $3,500,000 in 5%, 30-year bonds. The remainder will be held as a reserve fund for the extension of the properties of the Traction Company by the purchase or lease of the Bay Shore Terminal Co. and possibly the Atlantic Terminal Co., and also for the extension of the line now begun to Suffolk.

MACON, GA.—The city council has granted the Macon Railway & Light Co. a franchise to extend its line out Columbus Road, also to Summerfield, a distance of about three miles. J. T. Nyhan is Gen. Mgr.

JACKSONVILLE, FLA.—The County Commissioners have granted George W. Clark, owner of Panama Park, the right-of-way for an electric railway here.

STANFORD, KY.—W. G. Schamberger, Pres. of Interstate Traction Co., Gallatin, Tenn., advises us that no definite plans have been made for building this line from Stanford to Liberty, Ky. Surveys are nearly completed. W. H. Spradlin, [illegible]tin, is Ch. Engr.

TOLEDO, O.—E. Darrow, [illegible] Engr. and Gen. Mgr. of Toledo & Indi[illegible] Ry. Co., advises us that contracts will [illegible] at in July for proposed extension from [illegible] O., to Delta, to Napoleon, to Defi[illegible] O., and to Fort Wayne, Ind. All surveys [illegible] made and right-of-way is secured. The [illegible]any now operates 60 miles of railw[illegible] connecting Toledo, Swanton, Delta Wa[illegible], Pettisville, Stryker, Archbold and [illegible].

COLUMBUS, IND.—We are [illegible]ially advised that right-of-way is se[illegible] and surveys made for Columbus & [illegible]ur Traction Co.'s proposed line from [illegible]umbus to Seymour, 20 miles, with exte[illegible] from Indianapolis. It is to be built b[illegible]ties owning the Indianapolis, Columb[illegible] Southern Ry. Capital is secured. F[illegible] Smith, of Columbus, Ind., is Pres.; J. [illegible] Joloff, of Franklin, Ind., is Ch. Engr. [illegible]any was recently incorporated with $50[illegible] capital.

DETROIT, MICH.—We are [illegible]ially advised that the common council [illegible] appropriated $15,000 for a rapid transit [illegible]m across Belle Isle bridge using trackl[illegible] trolley or automobiles. Length of route [illegible] miles (round trip). Specifications [illegible] ready May 15. A. S. Hatch, 275 Av[illegible] Ave., Detroit, is Engr.

UNIONVILLE, ILL.—R. B[illegible] Leeper, Unionville, writes us, under d[illegible] of April 11, as follows: "I believe I ha[illegible] sufficient encouragement from those inter[illegible] to venture to say to you that if a c[illegible] railway of some kind can be constructed from Metropolis, Massac County, Ill., via [illegible]ockport, to New Liberty, Pope County, [illegible] which is situated on the Ohio River just [illegible]low the mouth of the Cumberland River [illegible] people of these towns and also those al[illegible] the line will take hold of it. The distan[illegible] is about 20 miles, through an almost level country requiring little grading, no trestles and but a few small bridges. The section [illegible] country through which the road would [illegible] is especially adapted to the growth of fruits and vegetables, and a Fruit Growers' Association has just been organized for the purpose of developing it. The greatest drawback will be in getting the products from the farm to the depot for final shipment, as the daily trip of several miles for men and teams in the busiest season of the year and over none too good roads means a great loss of valuable time as well as damage from jolting to the contents of wagon, whereas if an electric or gasoline 'accommodation train'—or even a tramway—would stop and take up the products along the line, many more could be induced to take part in the horticultural enterprise."

DES MOINES, IA.—We are officially advised by Richard R. Rollins, Pres. of Des Moines & Indianola Interurban Co., that contracts will be let this summer for construction of proposed line from Des Moines to Indianola, 16 miles. A 25-year franchise has been granted in Indianola. Right-of-way and terminals are secured in Des Moines. Capital has been partially obtained. Lewis Martin, at Des Moines, Ia., is Ch. Engr.

BROOKINGS, S. DAK.—A. B. Crane, of Brookings, Engr.-in-Charge of preliminary survey for the proposed line for the Brookings & Sioux Falls Ry. Co., advises us that this electric railway will be about 70 miles in length, from Brookings to Flandreau and Sioux Falls. Preliminary survey is under way to Flandreau, and reconnaissance from Flandreau to Sioux Falls. Right-of-way is being secured. Date for receiving bids for construction work has not been set, but will be soon. The company received its charter a few weeks ago. Capital is $100,000. Neil Stewart, of Brookings, is Pres.

DENVER, COLO.—S. S. Large, Fred W. Bailey and H. D. Allen have filed articles of incorporation with the Secretary of State for the Denver Municipal Traction Co., capitalized at $100,000. Term of the new corporation is 20 years. The articles specify that the new company will operate in the counties of Adams, Jefferson, Arapahoe, Denver and such other counties of the state as the board may direct.

We are officially advised that the Denver City Tramway Co. has applied for franchises for system of extensions in this city, and that the matter will come up for a vote of the taxpayers on May 15. A map of Denver showing present lines and proposed extensions is on file at office of Engineering News, New York. John A. Beeler is Vice-Pres. and Gen. Mgr., Majestic Bldg.

MARBLEMOUNT, WASH.—W. A. C. Rouse, of Mt. Vernon, Wash., Pres. of the Cascade Valley Railway Co., states that it is proposed to construct an electric railway from Marblemount to Horse Shoe Basin, a distance of about 25 miles. Probable cost, $1,000,000.

SAN BERNARDINO, CAL.—We are officially advised by W. L. Vestal, Secy. Board of Trade, that the San Bernardino Valley Traction Co. proposes to build an extension to Rialto. Survey has not been made yet. Capital is secured. John H. Fisher is Gen. Mgr. and Pur. Agt., San Bernardino. Company now operates 35 miles of line.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

MANSFIELD, MASS.—It is reported that plans are about completed for an extension to the municipal electric light plant here.

WESTCHESTER, N. Y.—Wilson and Butler, Archs., are engaged in preparing plans for a power-house to be erected in this county by the New York, Westchester & Boston Ry. Co. The estimated cost is $500,000.

BUFFALO, N. Y.—The New York and Ontario Power Co. has been incorporated for the purpose of making power to supply Plattsburgh, Ogdensburg, and several other places. The company is capitalized at $2,000,000, and the directors are D. R. Creighton, Jr., J. W. Liston and W. F. Burt, of Ogdensburg, N. Y.

MIDDLETOWN, N. Y.—A large power-house is to be built at Glenmere Lake to supply Goshen, Chester, Warwick and Florida with lighting power. Eugene Cable and B. R. Moore are the managers.

NIAGARA, N. Y.—It is reported that a distributing station will be built here by the Niagara Falls Electrical Transmission Co. The capital of the company has been increased to $[illegible]00,000, and transformer stations are to be erected.

WEST POINT, N. Y.—We are officially advised that the CHURCH CONSTRUCTION CO., New Building, West 25th St., has the contract to build a power-house here for the U. S. Government, at $167,200. Other bidders were: T. G. Carlin, Brooklyn, N. Y., $168,000; J. W. Bishop, Bridgeport, Conn., $169,000.

CAZENOVIA, N. Y.—It is reported that this city will install an electric light system at a cost of about $2,500.

NEW YORK, N. Y.—We are officially advised that the ABBOT-GAMBLE CO. and T. B. BRYSON have been awarded contract for the pneumatic and foundation work for the new building of the New York Edison Co.

SYRACUSE, N. Y.—THE ARCHBOLD-BRADY CO. has been awarded the contract for stringing high tension wires between Clarks Mills and Manlius Center in the work of electrifying the West Shore between this city and Utica. The contracts for the erection of four sub-stations have been let to the JOHN F. HUGHES CONSTRUCTION CO., of Utica. Without equipments, the stations will cost about $25,000 each.

NEWARK, N. J.—THE ABBOT-GAMBLE CO., 32 Broadway, New York, has the contract for constructing a conduit system for the City Hall Commission here.

DURYEA, PA.—Preparations are being made here for the installation of an electric light plant here.

WILMINGTON, DEL.—Plans have been prepared for a brick power house to be built here for the Philadelphia, Baltimore and Washington R. R. A. U. Crawford is Engr. branch lines.

WILMINGTON, DEL.—It is reported that the Brandywine Gas & Electric Co., incorporated by William H. Fuhr, Jr., and others, with a capital of $100,000, has applied to the city for the right to do business here.

WASHINGTON, D. C.—Bids, in triplicate, are asked until 2 p. m., May 2, by Col. Charles S. Bromwell for lighting portions of public grounds in this city during the year ending June 30, 1907.

WASHINGTON, D. C.—The Potomac Electric Power Co. has let contract for erecting power-house, on the Benning Road, to J. G. WHITE & CO., 49 Exchange Pl., New York City, at $100,000. L. E. Sinclair is Supt.

STAUNTON, VA.—The Blue Ridge Light & Power Co. will greatly increase its plant here.

INDEPENDENCE, VA.—A power plant is to be built here by the Independence Electric & Mining Co.

SUMTER, S. C.—The Sumter Light, Power & Water Co., capital $80,000, has been chartered here. Incorporators: Marion Moise, of Sumter; G. E. Ladshaw and F. T. Bryant, of Spartanburg.

TUSCALOOSA, ALA.—It is reported that Robert Jemison and others have been granted a franchise by the city for water-works, electric light plant, gas plant and street railway.

LEXINGTON, MISS.—Bonds amounting to $22,500 are to be issued by the mayor and aldermen for the erection of a municipal electric lighting plant.

MADISONVILLE, KY.—Bids are asked until May 1 by W. C. Morton for construction of an electric plant here; estimated cost, $30,000.

LOUISVILLE, KY.—It is reported that about $300,000 will be expended in improvements on the plant of the Louisville Lighting Co., at 14th and Magazine Sts. It is proposed to install a turbo-generator. A. M. Worthington is Manager.

PAULDING, O.—An electric light plant is under consideration here; estimated cost, $10,000.

CLEVELAND, O.—The Cleveland Electric Illuminating Company will erect a large brick addition to its power-house on Canal Road, at a cost of about $50,000. The general contract has been awarded to JOHN GILL & SONS. Robert Lindsay is Gen. Supt. of the electric company.

The Cleveland Light & Power Co. has made a formal application to the council for a street lighting franchise. D. J. Hard is Treas.

PERU, IND.—The Logansport and Wabash Valley Gas Co. is planning to commence operations on its new power-house in West Peru on or about May 1.

PONTIAC, MICH.—The Clinton River Power Co. proposes to erect a power plant here at a cost of about $120,000. H. von Schon, of Detroit, is Engr.

OLNEY, ILL.—The Pennsylvania Oil & Gas Co., of Olney, has been incorporated by I. L. Brooks and others, with a capital of $2,500.

CHICAGO, ILL.—It is reported that the Chicago Edison Co. and the Commonwealth Electric Co. will make improvements amounting to about $4,500,000. W. L. Abbott is Ch. Engr. and R. C. P. Holmes is Purchasing Agent of both companies.

The Vulcan Electric Heating Co., with capital of $50,000, has been incorporated by Carnahan Slusser & Co., of 79 Dearborn St., Chicago.

GALESBURG, ILL.—The Home Lighting & Power Co. has been formed here by E. P. Robson and others, with a capital of $150,000.

CHICAGO, ILL.—Bids are asked until noon, June 13, by I. J. Bryan, Clk. of Sanitary District, Chicago, for furnishing wooden and metal transmission poles. Robert R. McCormack is Pres. Bd. of Trustees. (Advertised in Engineering News.)

ST. CLOUD, MINN.—E. F. Moore and others, of St. Cloud, are planning to generate 12,000 HP. by dams at Clearwater and Monticello, in connection with the Mississippi River Power Co.

BELLEVILLE, KAN.—Bids are asked until about May 1, by John B. Peach, City Clk., for the construction of an electric light plant; estimated cost, $20,000. W. K. Palmer of Kansas City is Engr.; J. E. Caswell is Mayor.

TOPEKA, KANS.—Council has passed a resolution that the city engineer and superintendent of the electric light plant furnish estimates for the enlargement of the city electric light plant.

HOLDREGE, NEB.—Wm. T. Darley, of Chicago, and Joel M. Roberts, of York, Neb., are seeking a franchise to build a gas plant here.

JOPLIN, MO.—It is reported that the Joplin Electric Supply and Construction Co. has filed articles of incorporation; capital, $5,000.

EUREKA SPRINGS, ARK.—G. U. Matthews contemplates the erection of a light and power plant, to be operated by water, at a point about eight miles from Eureka Springs, as soon as the specifications are ready and at an estimated cost of $35,000. He wishes to correspond with makers of turbine wheels.

PALO PINTO, TEX.—Cicero Smith and others of Mineral Wells, Tex., have incorporated the Palo Pinto Gas Light & Power Co.; capital, $50,000.

AMARILLO, TEX.—Amarillo Gas Co. has been incorporated by J. L. Storm and F. S. Storm, of Kirksville, Mo., and L. S. Stowell, of Amarillo. Capital, $50,000.

SHAWNEE, OKLA.—F. P. Stearns, of Shawnee, and others, have incorporated the Shawnee Gas & Electric Co.; capital, $750,000.

MARIETTA, IND. T.—It is reported that G. SAEGER, of Rich Hill, Mo., has been awarded contract to construct water-works and electric light plant here, at $25,144.

DURANGO, COLO.—It is reported that the Animas Power Co. will expend $650,000 in improvements to its plant. A great part of this money will be used to bring water from Lime Creek to the main storage reservoir.

GEORGETOWN, WASH.—The Seattle Electric Co. has let contract for the erection of a power-house here to FRANK B. GILBRETH, of 34 West 26th St., New York, at about $250,000.

SPOKANE, WASH.—It is reported that the People's Gas Co. has been formed here, with a capital of $1,000,000, by William F. Kyle.

SANGER, ORE.—The Eagle River Electric Power Co. is reported to be planning an electric plant to be built near Sanger, for the purpose of supplying power to mines.

PORTLAND, ORE.—Contracts have been let for the building of a large power development plant on the Deschutes River, cost of which will be about $20,000.

OREGON CITY, ORE.—An additional power plant is to be built here by the Portland General Electric Co. The company also intends to extend its lighting plant at Portland.

FRESNO, CAL.—The Kings River Power Co. is planning the erection of four separate power plants at a cost of $2,000,000 each. The first will be built near Trimmers; the second at the junction of Mill Creek and Kings River; the third at the junction of Middle and South Forks; and the fourth at the junction of Boulder Creek and South Fork.

LOS ANGELES, CAL.—The Pacific Light & Power Co. has awarded the contract for a steam-electric plant of 15,000 KW. capacity to CHARLES C. MOORE & CO., of San Francisco, Cal. The plant will be located at Redondo Beach and will cost about $1,250,000. It will comprise the following equipment: Babcock & Wilcox boilers, McIntosh & Seymour combined horizontal-vertical compound engines direct connected to General Electric generators of 5,000 KW., Harrisburg tandem compound exciter units, Wheeler and Edwards condenser apparatus, Chapman valves, Charles C. Moore & Co.'s oil-burning equipment, Green fuel economizer, and Weber reinforced concrete smokestacks.

PASADENA, CAL.—Election will be held on May 3 to vote on bonds for $125,000 for a municipal light plant. S. F. Pearson is City Engr.

VIRGINIA, NEV.—S. Longabaugh is forming a company to supply this and neighboring cities with electricity. The generating plant will be built south of Slide Mountain.

SALT LAKE CITY, UTAH.—Contracts for 60 miles of gas mains and buildings will be let by the Utah Gas & Coke Co. R. B. Brown, of Milwaukee, is Ch. Engr.; Wm. J. McCorkindall, of Beaumont, Tex., is Supt. of Construction.

HUNTINGTON, UTAH.—Wm. Howard owner of light plant has started the preliminary work on power-house. We are officially advised that bids will be asked for everything needed in the construction of the power-house, including all brick and wire necessary. The power will be generated by water and will be used for light and machinery purposes. E. A. Howard is Des. Engr.

TORONTO, ONT.—The Municipal Power Commission reports state that $2,000,000 can be saved annually by Western Ontario, by the construction of a municipal development plant at Niagara, and by the erection of a transmission line to carry energy to the various cities and towns interested. The cost would be approximately $10,000,000. The report is unanimous, being signed by E. W. B. Snider, Chn.; W. F. Cockshutt, Adam Beck, P. W. Ellis, and Reginald A. Fessenden, Consult. Engr.

CHATHAM, ONT.—George Nicolas Ifft, American Consul, at Chatham, advises us that last fall there was a revival in Kent and Essex Counties of prospecting for oil and natural gas, with most encouraging results. Some good oil wells and a number of strong "gassers" were struck. This work is being done by American companies, under Canadian license. There is now a project to pipe natural gas from Tilbury to Chatham, a distance of 15 miles, and also to other towns in the vicinity of the gas belt.

The Chatham Steam Heating Co., a concern using the exhaust steam from the power-house of the Chatham, Wallaceburg & Lake Erie Ry. Co. here, and which has about a mile of mains in the streets of Chatham, will extend both its mains and laterals this summer.

MORRISBURG, ONT.—Contract has been let to WILLIAM BIRMINGHAM, Ottawa, Ont., for constructing a power-house on the St. Lawrence River canal here, at $73,600.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

WALDOBORO, ME.—This town has voted to build a steel bridge over the Medomac River, to be completed by July.

FITCHBURG, MASS.—It is reported that the Boston & Maine R. R. Co. will replace the wooden bridge at Putnam St. with a modern three-track steel structure. H. Bissell, Boston, is Ch. Engr.

BOSTON, MASS.—The Boston & Albany R. R. Co. has awarded the contract for masonry abutments for the new bridge on Maverick St., East Boston, to JOSEPH ROSS & SONS, 28 School St., Boston.

The following bids have been received by the Cambridge Bridge Commission for furnishing material and constructing the granite parapet and steps for abutments and upper masonry of wings, Boston abutment of the Cambridge Bridge: Wm. L. Miller, Boston, $23,644; Austin Ford & Son, Cambridge, $23,100; Holbrook, Cabot & Rollins, 6 Beacon St., Boston, $22,800.

GLOUCESTER, MASS.—It is reported that HOLBROOK, CABOT & ROLLINS, 6 Beacon St., Boston, have been awarded the contract to construct the new cut bridge at Gloucester, at $62,000. W. L. Webber is Cy. Engr.

HARTFORD, CONN.—The wooden bridge over the Park River at South Forest St. will be rebuilt at an estimated cost of $8,500. F. L. Ford, City Engr., is preparing plans.

TORRINGTON, CONN.—The council has passed ordinances providing for the erection of an iron bridge over the Naugatuck River at Church St.

NEW HAVEN, CONN.—It is reported that the New York, New Haven & Hartford R. R. Co. will replace the Shore Line division bridge over the Pawtuxet River with a steel span to be 125 ft. long. It is also stated that the same company will build bridges over its new cut at all streets from Olive to Water St. at a cost of $70,000. C. S. Mellen, New Haven, is Pres.

HARTFORD, CONN.—Contract for the construction of a cement and masonry bridge over Woods River at Albany Ave. has been awarded to the HARTFORD PAVING & CONSTRUCTION CO., Hartford, at $17,481. Other bids were: Fred T. Levy & Co., Springfield, Mass., $21,004; Charles Slocum, Hartford, $18,164; F. B. & W. H. O'Neil, Hartford, $18,462; Russel Contracting Co., New Haven, $23,050; F. S. & A. D. Gore Corp., Boston, Mass., $23,307; L. Suzio Co., Springfield, $20,551; Richards & Gaston, New York, $18,340; Geo. M. Atkins Co., Palmer, Mass., $18,588. Detailed prices for this work will be published under "Contract Prices" in Engineering News next week.

NEW YORK, N. Y.—The following bids have been received for widening the bridge over the New York & Harlem R. R. at 161st St.: John Kenny & Co., 39 Courtland St., $51,064; Kelly & Kelley, 45 E. 42d St., $39,758; T. A. Hagerty, $37,366; Leslie McHarg, 299 Broadway, $40,381; Cooper & Evans, 220 Broadway, $41,466; Clinton Beckwith, 49 West 27th St., $47,781. Louis Haffen is Pres. Bronx Boro.

PORT JERVIS, N. Y.—The Erie R. R. Co. is reported to have let to the McCLINTIC-MARSHALL CONSTRUCTION CO., Pittsburg, Pa., a contract for building a double track steel viaduct, 3,200 ft. long and 200 ft. high, over Moodna Creek, east of Port Jervis. F. L. Stuart, 21 Cortlandt St., New York, is Ch. Engr.

NIAGARA FALLS, N. Y.—Bids are asked until 8 p. m., May 15, for building two bridges. Plans, specifications and blank proposals are on file at office of Engineering News, New York. W. W. Read is City Engr. (Advertised, Engineering News.)

TRENTON, N. J.—NEWTON A. K. BUGBEE has been awarded contract to build the new Brookville bridge, at $1,430.

NEWARK, N. J.—The joint bridge committee of the Freeholders of Essex and Hudson counties have accepted the plans and specifications submitted by Engineers Owen and Dashe for the new Clay St. bridge over the Passaic River. The new bridge will have a draw span of 242 ft. and its total length will be 324 ft. A new central pier of stone will be erected, as will also two breast piers at the banks. Each draw channel will be 75 ft. wide. The bridge will be of riveted steel construction throughout. The roadway will be 50 ft. wide, paved with wooden blocks, with an 8-ft. sidewalk on each side, making a total width of 66 ft. It is stated that the bridge will cost about $153,000. James Owen is County Engr. of Essex county.

ALLENTOWN, PA.—The Lehigh Valley Transit Co. will build a bridge over the ravine between Allentown and South Allentown, to be 1,800 ft. long and 120 ft. high, costing $350,000. W. S. Hall is Ch. Engr.

HARRISBURG, PA.—The Council has placed the Board of Public Works in charge of the erection of the Mulberry St. bridge for which $200,000 has been appropriated. A. Carson Stamm is Chn.

PHILADELPHIA, PA.—Bids are asked until noon, May 15, by the Bureau of Surveys, Department of Public Works, for the erection of Walnut Lane Bridge. Thomas L. Hicks is Director. Plans and specifications are on file at office of Engineering News, New York. (Advertised, Engineering News.)

SALINA, PA.—Bids are asked until noon, May 2, by J. M. Shumaker, Supt. Pub. Grounds and Bldgs., for rebuilding the bridge over the Kiskiminetos River.

WILKES-BARRE, PA.—Bids are asked until May 25 by Fred H. Gates, City Clk., for the construction of a steel and iron girder bridge. W. V. Ingham is City Engr.

RICHMOND, VA.—J. T. WILSON, 923 E. Main St., has been awarded the contract for building a viaduct from Broad St. to Sledd St. over the tracks of the Richmond & Chesapeake Bay R. R. Co. The structure will be of reinforced concrete.

LIVE OAK, FLA.—Contracts have been awarded by the County Commissioners to the CONVERSE BRIDGE CO., of Chattanooga, Tenn., for drawbridges at Branford and Luraville, each to be 350 ft. long.

BATON ROUGE, LA.—Press reports state that a new bridge will be built over the Mississippi River at this point by the Illinois Central and the Southern Pacific R. R. Companies, to cost $1,000,000. William Hood, San Francisco, Cal., is Ch. Engr. of the Southern Pacific R. R.

ALEXANDRIA, LA.—Bids are asked until May 22, by the Police Jury of Rapides County for the erection of a steel bridge.

OSBORN, O.—The commissioners of Clarke and Greene counties will soon ask for bids for building a concrete steel arch bridge at Osborn. The Osborn Engineering Co., Cleveland, O., are Consult. Engrs.

GREENVILLE, O.—The Osborn Engineering Co., Consult. Engrs., Cleveland, O., have prepared plans for the construction of a 125-ft. span, 60 ft. wide, concrete arch bridge on Broadway, and bids will be asked about June 1.

TOLEDO, O.—According to press reports, the mayor has signed a resolution providing for a straight bridge, 82½ ft. wide, at Cherry St., and Oscar Sabin, Pres. Bd. Pub. Service, has been instructed to have plans prepared.

CLEVELAND, O.—The following bids have been received for constructing superstructure and substructure of approaches to the Jefferson Ave. bascule bridge: Superstructure, Interstate Engineering Co., $5,825; Van Dorn Iron Works, $6,735; and Variety Iron Works, $6,720. Substructure, Northern Ohio Paving & Construction Co., $12,060; Wm. Kupper, $11,130; C. H. Fath & Son Construction Co., $11,765; J. B. Frauenthal, $12,888; Williams Bros. & Morse, $13,758; Jas. Duff Construction Co., $14,347; and Beers & Doolittle, $15,501. W. H. Evers is County Engr.

Plans are being prepared, according to reports, for converting the Central viaduct into a high level bridge of one span. Estimated cost is $750,000.

RENSSELAER, IND.—Bids are asked until May 7 by the Commissioners of Jasper County for the erection of a steel tube bridge. J. N. Leatherman is County Audr.

MT VERNON, IND.—The following bids have been received by Silas G. Howard, County Audr., for building four steel bridges: Vincennes Bridge Co., Vincennes, Ind., $2,896; Joliet Bridge Co., Joliet, Ill., $3,134; W. A. Braden, Terre Haute, $3,153; H. W. Eigenmann, Owensboro, Ky., $3,975; Indiana Bridge Co., Newcastle, Ind., $3,653.

PLEASANT HILL, ILL.—This town has voted to issue $6,000 bonds to cover the cost of building a new bridge.

MILWAUKEE, WIS.—Plans for the Sixth St. viaduct, submitted by C. F. Loweth, Bridge Engr., of the Chicago, Milwaukee & St. Paul R. R., are stated to have been approved by the Council Committee on Bridges and Viaducts. The parts the railroad offers to build will cost probably $110,000. The remaining part will cost $375,000.

GREEN BAY, WIS.—It is reported that the bridge of the Chicago & Northwestern Ry. Co.'s bridge over the Fox River on the Manitowoc-Gillette extension will have to be rebuilt because of faulty construction. Press reports state that nine of the seventeen piers are out of plumb owing to the presence of quicksand.

ALBERT LEA, MINN.—Bids are asked until 6 p. m., May 3, for constructing a steel bridge. C. E. Brainerd is City Clk.

CROOKSTON, MINN.—The county commissioners have passed resolutions for the establishment of two river bridges, one across Hill River in Hill River Township, and the other across the Popular River in Brandsvold Township. The first a span bridge and the second a pile bridge.

DE SMET, S. DAK.—Bids are asked until May 16 for the construction of a steel bridge over Red Stone Creek. J. Q. Purintun is County Audr.

BELLE FOURCHE, S. DAK.—Specifications and contract drawings for five bridges, as advertised April 19 to May 10, are on file at office of Engineering News, New York. Bids to be opened May 15.

LITTLE ROCK, ARK.—The OTTUMWA BRIDGE CO., of Ottumwa, Ia., is stated to have received the contract for erecting a steel viaduct at Main and Eighth Sts., at $40,000. E. A. Kingsley is City Engr.

GALVESTON, TEX.—It is reported that the railroads entering Galveston will pool their interests and build a stone causeway to connect the city with the mainland. H. C. Rouse, 49 Wall St., New York, Chn. Bd. Directors, Missouri, Kansas & Texas R. R. Co., is interested.

HAMPSTEAD, TEX.—E. P. Alsbury, Engr., of Houston, has submitted an offer to construct a bridge over the Brazos River for $8,500, and it is reported that he will receive the contract. C. H. Wier, Hempstead, is interested.

FOUNTAIN, COLO.—Contract for the construction of a concrete bridge across Sand Creek has been awarded to the COMMONWEALTH CONSTRUCTION CO., of Denver, at $3,764. WALKER & RUSSELL, of Colorado Springs, received the contract for a bridge in Ivywild Township, at $1,015.

CALDWELL, TEX.—The Atchison, Topeka & Santa Fe Ry. Co. is preparing to build a steel bridge over Davidson Creek. W. B. Storey, Jr., Topeka, Kan., is Ch. Engr.

DENVER, COLO.—The WALTER SHARP BROS. CO., of Raton, N. Mex., have been awarded the contract for concrete arch bridge near Guadalupe, at $4,288. T. W. Jaycox is State Engr.

RENTON, WASH.—It is reported that a drawbridge, 180 ft. long, will be built over the White River at Renton Junction, at a cost of $9,000.

CASTLE ROCK, WASH.—Contracts for bridge construction have been awarded as follows: Mill Creek bridge, J. R. McMILLAN; Lower Tontle bridge, INTERNATIONAL CONTRACT CO., of Seattle.

ABERDEEN, WASH.—Bids are asked until May 7 by W. D. Campbell, County Audr., for the construction of an 80 ft. steel bridge, with approaches, over Cloqualum Creek.

SALEM, ORE.—GEORGE IRVING, of Salem, has secured the contract to build a bridge across the Boise River, at about $20,000.

PORTLAND, ORE.—Douglas W. Taylor, City Engr., has prepared plans and specifications for a steel bridge over Sullivans Gulch. Foundations will be of concrete. Estimated cost is $64,750.

LAKEPORT, CAL.—Bids are asked until 1 p. m., May 7, by the Board of Supervisors of Lake County for the construction of a steel bridge over Scotts Creek. S. Mathews is Clk.

FRESNO, CAL.—Bids are asked until 10 a. m., May 12, by the Supervisors of Fresno County for the construction of a reinforced concrete bridge over the San Joaquin River. W. O. Miles is Clk.

JAMESTOWN, CAL.—COTTON BROS., of Oakland, have been awarded the contract for four county bridges, at $24,155.

SANTA ROSA, CAL.—The following bids have been received for the construction of the E St bridge: Wm. Peacock, concrete, $12,-656, reinforced concrete, $15,000, stone, $17,-400; American Bridge Construction Co., steel, $8,990; Burell Construction Co., reinforced concrete, $13,500, steel, $9,900; Atlantic & Gulf & Pacific Co., concrete, $13,945, concrete, reinforced with stone facing, $16,850, steel girder, $8,845.

FRESNO, CAL.—W. O. Miles, Clk. Bd. Supervisors of Fresno Co., will receive competitive plans for the construction of a reinforced concrete bridge across the San Joaquin River until 10 a. m., May 12.

OGDEN, UTAH.—It is reported that the Salt Lake & Ogden R. R. Co. will build a concrete bridge over the Weber River at Ogden. E. A. Vail, Salt Lake City, is Ch. Engr.

CHATHAM, ONT.—We are officially informed that the city of Chatham and the Chatham, Wallaceburg & Lake Erie Ry. Co. will jointly build a bridge across the Thames River, at Chatham, this summer at an estimated cost of $40,000. George Nicolas Iff is the American Consul at Chatham. W. N. Warburton is Gen. Mgr. of the C., W. & L. E. Ry. Co.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

WILLIAMSTOWN, MASS.—We are informed that Winslow & Bigelow, Archs., 3 Hamilton Place, Boston, have plans prepared and contract will be let about April 30 for a brick veneer residence, 100 × 50 ft., for Robert Cluett. Estimated cost is $35,000.

BOSTON, MASS.—Bids are asked until April 27 by George B. Howe, Arch., 15 Beacon St., Boston, for the construction of a warehouse, three stories, 85 × 125 ft., mill construction, for Chas A. Cushman. Heating, plumbing and electric work in a separate contract.

SALEM, MASS.—PITMAN & BROWN have been awarded the contract for a 6-story shoe factory, 318 × 45 ft., by Wm. H. Grove.

NEW YORK, N. Y.—The McGraw Publishing Co. has awarded to FRANK B. GILBRETH, 34 West 26th St., the contract for a 10-story reinforced concrete building, 126 × 99 ft., on 29th St., between Seventh and Eighth Aves. Radcliffe & Kelley, 3 West 29th St., are Archs.

Bids are asked until 11 a. m., April 30, by C. B. J. Snyder, Supt. School Buildings, for completion of the general construction contract on public school 42, Washington and Westover Aves.

NEW YORK, N. Y.—CHAS. H. PECKWORTH, 415 Hudson St., has been awarded the general contract for a 5-story stable, 50 × 200 ft., to be erected at 173 and 175 West 129th St., for the Borden Condensed Milk Co. Estimated cost, $65,000. Howard G. Chamberlain, 1181 Broadway, is Arch.

It is reported that the New York Edison Co. will erect a power station at 155 East Sixth St. Building will be 40 × 100 ft. and will cost $75,000.

F. C. Zobel, Arch., 24 East 21st St., has plans prepared for a 7-story loft building, 42 × 100 ft., to be erected at 110 and 112 West 26th St., for Max Solomon. Red brick with limestone trim. Estimated cost, $95,000.

Stern and Morris, Archs., 1133 Broadway, have prepared plans for a 6-story elevator apartment, 75 × 100 ft., to be built for Kleinfeld & Engelsberg, at Broadway and 112th St.

Oppenheim, Collins & Co., 921 Broadway, it is reported, will build a 12-story building to run through from 34th to 35th Sts., between Fifth and Sixth Aves. Property has been secured.

Plans for a new court-house for Queens County have been prepared by Peter M. Coco, 114 East 23d St. It is expected that building operations will commence as soon as they are approved by the Municipal Arts Commission. Joseph Bermel is Pres. Queens Boro.

NEW YORK, N. Y.—The following bids for building a department storehouse and offices at West 57th St. and North River have been received by J. A. Bensel, Comr. of Docks: Springstead & Adamson, 434 East 107th St., $99,354; Kelley & Kelley, 45 East 42d St., $73,764; A. S. Traut, 215 West 125th St., $89,800; James J. Buckley, 310 West 65th St., $83,278; Chas. H. Peckworth, 415 Hudson St., $83,467; John H. Parker Co., 225 Fourth Ave., $79,897; F. W. Carlin Construction Co., 44 Court St., $86,000; Chas. Mead Co., 299 Broadway, $78,200; Northeastern Construction Co., 23d St. and Broadway, $76,300; H. W. Weed & Co., 124 West 45th St., $82,228; W. H. Jenks & Co., 129 Pearl St., $100,923; J. & L. Moreland Co., 1910 Park Ave., $96,500; Buckley Realty & Construction Co., 42d St. and Broadway, $85,-000; York Construction & Supply Co., 1189 Broadway, $97,640.

NEW YORK, N. Y.—The following bids were received April 16 by the Board of Education, C. B. J. Snyder, Supt. of School Bldgs., for the erection of an addition to public school 135, 51st St. and First Ave.: Tolmie & Kerr, 205 West 30th St., $55,887; Jas. J. Buckley, 310 West 65th St., $53,556; Geo. Hildebrand, 38 Park Row, $52,700; P. Gallagher, 1181 Broadway, $58,197; P. Sullivan, 230 Grand St., $52,640; Thomas Cockerill & Son, 147 Columbus Ave., $52,-300; John Furys, 1684 Second Ave., $60,347; C. H. Peckworth, 415 Hudson St., $52,489. Bids were also received on the same date for construction of public school 150, Christopher St., Brooklyn. The bidders were: Kelly & Kelley, 45 East 42d St., $431,919; Wm. P. McGarry, 236 Huron St., Brooklyn, $427,883; Clarke & Stowe, 221 Greenpoint Ave., Brooklyn, $397,300; John Anes & Son, 957 Broadway, Brooklyn, $394,600; Peter Cleary, 922 St. Marks Place, $404,334; P. J. Walsh, 503 Fifth Ave., $418,000; Thos. Cockerill & Son, 147 Columbus Ave., $418,-900; Rich. E. Hennigham, 1 Madison Ave., $395,755; P. J. Brennan, Fuller Bldg., $395,000; Chas. H. Peckworth, 415 Hudson St., $418,640; Geo. Hildebrand, 38 Park Row, $390,700; Arci Construction Co., 99 Broadway, Brooklyn, $397,000.

NEW YORK, N. Y.—Louis Haffen, Pres. Bronx Boro., has received the following bids for prison work in the Bronx Borough courthouse: Pauly Jail Building Co., 1123 Broadway, $34,900; Van Dorn Iron Works Co., Cleveland, O., $28,500.

AUBURN, N. Y.—Bids are asked until May 18 by the building committee of Trinity Methodist Episcopal Church for the construction of a stone and brick church. C. D. Skinner, 148 East Genesee St., is Pastor. Brown & Davis, 41 East Fourth St., Cincinnati, are Archs.

CENTRAL ISLIP, N. Y.—Bids are asked until 3 p. m., May 2, by the State Commission in Lunacy, Albany, N. Y., for the construction of an addition to the residence of the Superintendent of Central Islip State Hospital. T. E. McGarr is Secy. (Advertised, Engineering News.)

ROSLYN (L. I.), N. Y.—McKim, Mead & White, Archs., 160 Fifth Ave., are preparing plans for the erection of a new building for the Trinity Episcopal Church, to cost about $45,000.

WATERTOWN, N. Y.—C. D. HODGE & CO. have been awarded the contract for a club-house for the Black River Valley Club, at $30,000. CAMPBELL & LEWIS received the plumbing contract. Thain & Thain, 4 East 42d St., New York, are Archs.

The trustees of the Universalist Church have awarded the contract for a new building to RICHARDO & STOCKWELL, at $45,582. Rev. Moses Harris is Pastor.

HOBOKEN, N. J.—Eugene Ciccarelli, Arch., Hudson Place and River, has plans prepared for a new public school which will be built at an estimated cost of $175,000.

TRENTON, N. J.—Plans have been completed for the erection of a public manual training school which, it is estimated, will cost $100,000. H. A. Hill, 40 East State St., Trenton, is Arch.

PRINCETON, N. J.—Cope & Stewardson, Archs., 320 Walnut St., Philadelphia, are preparing plans for the erection of a $100,000 dormitory at Princeton University.

JERSEY CITY, N. J.—Albert E. Westover, Arch., of Philadelphia, has plans prepared for a four-story stone and terra cotta theater, 160 × 160 ft.

HARRISBURG, PA.—C. H. Lloyd, Arch., 222 Market St., is preparing plans for the erection of a six-story apartment house, fireproof, brick and steel, at 35th and Walnut Sts. Miller & Baker are owners.

PITTSBURG, PA.—W. R. Kuhn, of Pittsburg, will erect an eight-story fireproof building at the corner of Pen and Highland Aves., at an estimated cost of $250,000. New York and Pittsburg architects are preparing competitive plans.

PITTSBURG, PA.—It is reported that H. A. Broza, of New York, has purchased a site, 69 × 297 ft., on Penn Ave. and has engaged E. J. Schellentrager, Arch., 1102 Empire Bldg., to prepare plans for a 6-story buff brick apartment house, to be built at an approximate cost of $200,000.

EAST PITTSBURG, PA.—We are officially informed that the Pennsylvania R. R. Co. has awarded the contract for a large tonnage of structural steel work to WM. B. SCAIFE & SONS CO., of Pittsburg, Pa., in connection with the improvements and new station under way at East Pittsburg.

McKEESPORT, PA.—It is reported that Henry C. Frick, Frick Bldg., Pittsburg, will erect an 8-story fireproof brick store and office building on Fifth Ave. to cost $300,000. William Carr, Frick Bldg., is in charge.

SCRANTON, PA.—According to press reports Sylvester V. Poll, of New Haven, is planning to erect a theater in Scranton at estimated cost of $250,000.

SCRANTON, PA.—H. J. Blackwood, Arch., 126 West Washington Ave., is preparing plans for the erection of an office building, to be ten stories, brick and steel, fireproof. Building will be erected at a cost of $200,000.

PHILADELPHIA, PA.—Wilson, Harris & Richards, Archs., Drexel Bldg., have prepared plans for the erection of a bank building at 18th St. and Girard Ave. for the Girard Ave. Trust Co.

W. W. REA'S SON has been awarded the contract for an 8-story building, 44 × 78 ft., to be built of reinforced concrete at Race and Hutchinson Sts. Charles Balderson, 411 Walnut St., is Arch.

Carl P. Berger, Arch., 603 South Penn Square, has prepared sketches for a theater, 100 × 174 ft., to be erected at Lancaster and Fairmount Aves., for G. A. Wegefarth, owner of the Grand Opera House.

Marshall & Fox, Archs., First National Bank Bldg., Chicago, and Amos W. Barnes, 134 South 8th St., Philadelphia, have been selected to prepare plans for the Forrest Theater, to be erected by the Broad Street Realty Co. for Nixon & Zimmerman, at Broad and Sansom Sts. Estimated cost is $300,000.

PHILADELPHIA, PA.—Bids are asked until April 27 by the Central Trust Co., Fourth and Market Sts., for the erection of a 6-story addition, brick, stone and steel, and fireproof, to their bank and office building. The estimated cost is $100,000.

HARRISBURG, PA.—The Pennsylvania & Cumberland Valley R. R. companies have asked the city of Harrisburg for the vacation of six streets, the ground to be used as a site for a joint freight depot, to cost about $350,000. The changes will involve the construction of two subways to carry streets beneath the tracks of the railroad. W. B. McCaleb, Harrisburg, is Div. Supt. Pennsylvania R. R. Co.

SPRING CITY, PA.—Bids are asked until noon, May 15, at the Governor's office, Harrisburg, Pa., for the erection of an institution for feeble-minded and epileptics near Spring City. P. H. Johnson, 1825 Land Title Bldg., Philadelphia. J. F. Sherwood, Secy.

ANNAPOLIS, MD.—All bids for remodelling the Naval Academy boat-house into a gymnasium have been rejected. It is reported that the government will undertake the work, letting sub-contracts. Ernest Flagg, 35 Wall St., New York, is Arch. T. H. Newberry, Asst. Secy. Navy, is in charge.

OCEAN CITY, MD.—W. A. Foreman, Arch., Builders 'Exchange, Baltimore, is preparing plans for a 5-story hotel, 75 × 250 ft., to be built at Ocean City. Brick and frame, electric light, electric elevators, baths, toilets, skylights, cold storage plant, etc. Estimated cost, $75,000.

ELLICOTT CITY, MD.—The Christian Brothers at Rock Hill College are planning the erection of a 3-story addition, 50 × 130 ft. The new building will be of stone and brick, and will cost $100,000.

WASHINGTON, D. C.—According to the Washington "Post," "an immense building, classical in style and one of the most pretentious in the city, will be constructed for the use of the State, Justice and Commerce and Labor departments on the squares bounded by Pennsylvania Ave., 14th, B and 15th Sts., if a report made to the Senate by the Committee on Public Buildings and Grounds is favorably acted upon. The bill which accompanies the report provides $3,000,000 for the initial expenses in starting construction on a building to cost $7,000,000."

WASHINGTON, D. C.—An apartment house of brick, stone and steel, eight stories, fireproof, is to be erected on Washington Circle. A. M. Schneider, Bond Bldg., is Arch.

RICHARDSON & BURGESS, Colorado Bldg., have been awarded the contract for a car barn for the Capitol Traction Co., at about $200,000.

A new building, four stories, brick, stone and steel, will be erected for the Columbia Hospital. An appropriation of $100,000 has been made.

JAMESTOWN, VA.—W. W. Sale, Lowenberg Bldg., has been designated by Governor Claude A. Swanson to receive tentative plans, specifications and suggestions for a building to be erected by the state of Virginia at the Jamestown Exposition. It has been decided to reproduce "Montpelier," the home of President James Madison, at the Exposition.

NORFOLK, VA.—An 8-story hotel, to cost $150,000, will be built on Tasewell St., adjoining the new Colonial Theater. The building, it is said, will be elaborately finished and equipped and will have between 100 and 125 rooms. The Colonial Building Corporation, which is putting up the theater, will prepare the plans.

NORFOLK, VA.—Breeze & Mitchell, Archs., 33 Chamberlain Block, are preparing plans for a department store building, 120 × 120 ft., six stories, for the Hecht-Hirschler Dry Goods Co. at Fazewell and Duke Sts. Estimated cost is $75,000.

MEMPHIS, TENN.—It is reported that an apartment house, to cost $60,000, will be erected on Court St., near Fourth St. Plans for the building have been prepared by Carney & Coney, Archs. The structure will be four stories, 50 × 148 ft. It will be constructed of pressed brick with stone and terra cotta trimmings, concrete foundation and gravel roof.

KNOXVILLE, TENN.—M. B. Arnstein & Co. will build a seven-story department store at a cost of $125,000. It is said that this will be the city's largest building.

MEMPHIS, TENN.—Chighizola, Hanker & Cairns, Archs., Scimitar Bldg., are preparing plans for a 4-story fireproof building, 38 × 149 ft., to be erected by Joseph Martin and Frank F. Hill, at a cost of $50,000.

CLEVELAND, O.—Contracts for the erection of the Outhwait school have been awarded as follows: Masonry, HENAHAN & KING; cut stone, HAMILTON & LEGHORN; iron and steel, NATIONAL IRON & WIRE CO.; fireproofing, NATIONAL CONCRETE FIREPROOFING CO.; heating, VAN SICKLE & WARREN CO. Total cost will be $63,000 for building and $62,584 for equipment.

PERU, IND.—Bids are asked until 2 p. m., June 7, by the Commissioners of Miami County for the construction of a court-house.

Lehman & Schmitt, 625 Garfi[illegible] land, O., are Archs. J. S. [illegible] Comr.

INDIANAPOLIS, IND.—Pl[illegible] prepared by order of Chas. [illegible] Mayor, for the erection of a [illegible] hall and colosseum on Marke[illegible]

BATTLE CREEK, MICH. [illegible] CO., of Traverse City, Mi[illegible] awarded the contract for a 2-[illegible] store building, 66 × 180 ft., a[illegible] Llewelyn, 164 Dearborn St. [illegible] Arch.

GRAND RAPIDS, MICH.—[illegible] has been awarded the contra[illegible] brick residence for Edward [illegible] $100,000.

DETROIT, MICH.—The Mi[illegible] ephone Co. will erect an addi[illegible] 112 × 100 ft., of pressed bri[illegible] stone trimmings, at an es[illegible] $160,000. W. I. Mizner, 16[illegible] is Secy.

AGRICULTURAL COLLEGE [illegible] tract for the engineering bu[illegible] cultural College has been awa[illegible] MEIR, EARLY & FITZPAT[illegible] sing, Mich. E. A. Bowd, La[illegible]

ANN ARBOR, MICH.—Pla[illegible] prepared by Spier & Rohn, [illegible] troit, for the erection of a hos[illegible] of $100,000.

IRON MOUNTAIN, MICH.—T[illegible] CONSTRUCTION CO., of Milw[illegible] has been awarded the contra[illegible] new high school at Iron Mounta[illegible]

CHICAGO, ILL.—Geo. W. Ga[illegible] Adams Express Bldg., has prepa[illegible] is taking figures for the erection [illegible] at Englewood Ave. and South [illegible] for Clifford Bros. Building will [illegible] ft. and will cost about $85,000.

JAMES TODD, 145 La Salle St. [illegible] has been awarded the masonry contract for a 3-story pressed brick and stone apartment house, 88 × 140 ft., to be erected at a cost of $75,000, by W. H. Cochran. W[illegible]mann & Steinbach, 625 West Chicago Ave., are Archs.

The following contracts have been let by Herman J. Gaul, Arch., 172 Washington St., for the erection of a 4-story convent, 72 × 62 and 80 × 39 ft., for the Josephina Convent, 800 North Oakley Ave.: Masonry, JOHN GERTEN & CO., 561 Cleveland Ave.; carpentry, MATT RAUEN, 615 Edgewater Place; plumbing, J. J. BARRETT, 163 Randolph St.; iron work, FRANK SCHAAR & CO., 92 to 98 Eleventh St. Total cost will be $75,000.

PEORIA, ILL.—The Peoria School Board is planning the erection of a new high school at a cost of $125,000.

ROCKFORD, ILL.—Contract for the 6-story bank office building to be erected for the Graham Safe Deposit Co. has been awarded to W. H. COOK, of Rockford, at about $100,000. R. T. Newberry, 184 La Salle St., Chicago, is Arch.

KANKAKEE, ILL.—The trustees of St. Viateur's college, which was recently destroyed by fire, have received donations aggregating $150,000 and will rebuild at Bourbonnais Grove, two miles north of Kankakee.

SPRINGFIELD, ILL.—W. C. Zimmerman, State Arch., Chicago, is preparing plans for a new Supreme Court building to be erected at Second St. and Capitol Ave., at an estimated cost of $350,000.

CHICAGO, ILL.—Nimmons & Fellows, Archs., 204 Dearborn St., are taking figures on a 6-story top addition, a 3-story mill and a 4-story building, 146 × 101 ft., at the Sears, Roebuck & Co. plant, Central Park Ave. and Howard St.

W. A. Nicholson, Arch., 6541 Greenwood Ave., has made plans for a 15-flat building to be erected on the North Side for C. Bauckman, 108 La Salle St. To be three stories, 125 × 50 ft., built of brick and stone, with composition roof. Estimated cost, $60,000.

Bids are asked until noon, April 27, by the Board of Education, for the construction of an addition to the Medill High School. Estimated cost, $75,000. D. H. Perkins, Tribune Bldg., is Arch.

Contract for the erection of a hospital at Greene and 60th Sts. for the Swedish-American Hospital Assn. has been awarded to E. P. STRANDBERG & CO., 159 La Salle St., at $60,000. L. G. Hallberg, 84 La Salle St., is Arch.

WAUKESHA, WIS.—The FOSTER CONSTRUCTION CO., of Waukesha, has been awarded the contracts for building a science hall, three stories, 52 × 132 ft., and a dormitory, three stories, 50 × 120 ft., for Carroll College, at about $85,000. Patton & Miller, 140 Dearborn St., Chicago, are Archs.

DUBUQUE, IA.—Harry J. Schlacks, Arch., 19 Randolph St., Chicago, is taking figures for the erection of a 3-story conservatory of music and art, 42 × 120 ft., fireproof, for the Mount St. Joseph College at Dubuque. Estimated cost is $60,000.

HIBBING, MINN.—FRED NORLANDER of St. Paul, has been awarded the contract to erect the new Hibbing high school, at about $85,000.

ST. PETER, MINN.—Bids are asked until 2 p. m., May 21, by A. H. Freeman, County Audr., for the erection of a county jail and sheriff's residence. A. J. Van Deusen, Winona, Minn., is Arch.

MINNEAPOLIS, MINN. — Berrand & Chamberlain, Archs., 617 Bank of Commerce Bldg., are preparing plans for an addition to the Northwestern Knitting Works, Aldrich and Western Aves. It will be 57 × 200 ft., five stories, reinforced concrete construction, pressed brick and cut stone. Estimated cost, $100,000.

MINNEAPOLIS, MINN.—L. A. Mahoneaux, Arch., 516 Lumber Exchange Bldg., is receiving bids for an addition to the city hospital. It will be steam heated, fireproof throughout, with electric lighting, marble work, electric elevators, etc., and will cost $90,000.

MINNEAP[illegible] MINN.—It is reported that the Minnea[illegible] Club, Second Ave. and South St., [illegible]aving plans prepared for a new building [illegible] cost $200,000. L. A. Lamer[illegible]ax, 516 L[illegible]r Echange Bldg., is Arch.

CROOKST[illegible] MINN.—Bonds are being offered for [illegible] to cover the cost of erecting a new fire [illegible]e house.

NEWTON [illegible]AN.—Bids are asked until May 14 by [illegible] Hagen, County Clk., for the erection of [illegible]ourt-house. Former bids rejected. J. [illegible]and & Squires, 734 Kansas Ave., Topek[illegible]e Archs.

LINCOLN [illegible]CB.—The contract for the erection of th[illegible]ockefeller University Temple building h[illegible]een awarded to LOUIS JANSEN at $[illegible].

FARGO, [illegible]DAK.—JOHNSON & POWERS, of Fargo, [illegible] been awarded the contract for the consti[illegible]n of a depot for the Great Northern [illegible] Co., at about $45,000. E. J. Pierson, S[illegible]aul, is Ch. Engr.

CHEYE[illegible] WYO.—Bids are asked until 10 a. m., [illegible]y 8, for the construction of a dungeon [illegible]e, including steel cell work. Thos. T. [illegible]n, at the penitentiary, will give further in[illegible]mation.

ST. LOU[illegible] MO.—The KELLERMAN CONTRACTING [illegible]O., Roe Bldg., has been awarded the co[illegible]ct for erecting a $180,000 6-story wa[illegible]ouse, 180 x 192 ft., at Ashley and First [illegible]s., for the Dronnek Realty Co. Isaac S. [illegible]aylor, 318 North Eighth St., is Arch.

CAMERO[illegible] MO.—R. G. Kirsch, Arch., Olive and [illegible]ith Sts., St. Louis, has prepared plans for a [illegible]ourt-house to be erected here, at a cost of [illegible],000.

LAREDO, TEX.—Bids are asked until noon, May 21, by Col. R. R. Stevens, Chief Q. M., Dept. of Texas, San Antonio, for the construction of officers' quarters, barrack building, mess hall and kitchen at Fort McIntosh.

DALLAS, TEX.—The STEVENSON-KENYON CONSTRUCTION CO., of Dallas, has been awarded the contract at $200,000 for the erection of Holy Trinity College at Oak Lawn. H. A. Overbeck, 249 Main St., is Arch.

SANDERSON, TEX.—Bids are asked until May 16 by Joe Kerr, County Judge, for the erection of a court-house and jail.

FORT WORTH, TEX.—Contract has been let for an addition to St. Joseph's Infirmary in this city at $86,000, work to begin immediately.

CANON CITY, COLO.—Plans are being prepared by F. S. Granger, of the Interurban Ry., for the erection of hotels and various other buildings at the hot springs near Canon City. Estimated cost is $200,000.

SPOKANE, WASH.—It is reported that the trustees of the local Y. M. C. A. are considering the letting of contracts at once for building the walls and the roof of the new building at First Ave. and Lincoln St. Of the $140,000 which is to be expended $102,000 has already been raised.

SEATTLE, WASH.—The contract for building the new Lincoln high school at Interlake Ave. and Allen Place has been awarded to MATTHEW DOW at $126,000.

SAN FRANCISCO, CAL.—It is announced by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, that bids will be received as advertised for the vacuum cleaner system for the San Francisco postoffice, in spite of the recent earthquake and fire in that city. The building was not sufficiently damaged to cause a change in plan. Bids are asked until 3 p. m., May 22. (Advertised, Engineering News, April 19.)

The almost absolute destruction of 14 square miles of buildings by an earthquake, followed by fire, last week, has upset all building plans reported recently. Preparations are already being made, however, to rebuild that portion of the city which is in ruins, and San Francisco promises to be a great center of activity in construction work during the next few years. Press reports state that many of the buildings which remain standing will have to be practically reconstructed. The burned section includes nearly all of the business and manufacturing district and, in addition to the buildings, much valuable machinery and other equipment will be replaced.

WINNIPEG, MAN.—Contract for the general construction of a 5-story fireproof store and office building to be erected here was let to C. A. P. TURNER, of Minneapolis, Minn., at $90,000.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

CHARLESTOWN, N. H.—We are officially informed that the following bids were received for installing water-works system here: ABLET & BOWERS, Cohoes, N. Y., $6,419 (contract awarded); H. Spinach, Naugatuck, Conn., $6,713; Bruno & Wilane, Boston, Mass., $6,680; L. A. Taylor, Boston, $6,756; P. A. McIntyre, Milton, Mass., $7,112; L. N. Farnum & Co., Boston, $7,390; Reardon & Byrne, Glens Falls, N. Y., $7,559; Falls & Summons, Rockland, Me., $7,859; Osgood Construction Co., Nashua, N. H., $7,933; Long & Little, Leominster, Mass., $7,917; F. E. Spinner, New York, $8,425; F. T. Ley & Co., Springfield, Mass., $8,536; Crosby & Parker, Brattleboro, Vt., $9,810; F. H. Corbin & Co., Boston, $10,408; H. H. Hanscom, Boston, $11,526.

MELROSE, MASS.—Bids are asked until noon, April 26, by W. Dabney Hunter, Engr. and Supt. Pub. Wks., for furnishing water and sewer pipe, castings, gates, valves, catch-basins and hydrants.

WINCHENDON, MASS.—At the regular town meeting for March it was voted to extend the water system to Winchendon Center, by aid of an auxiliary gas engine and pump and small stand-pipe. We are officially informed that this extension will cost about $7,000. Edwin L. Stone is Supt. W.-W.

PROPOSED WORK

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

Address, **WAINWRIGHT RANDALL**
Editor Construction News

PROVIDENCE, R. I.—The Blackstone Reservoir Co. is seeking incorporation with a capital of $200,000. It is reported that several companies are interested.

PAWTUCKET, R. I.—At a recent meeting of the council a resolution was passed appropriating $200,000 for increasing the pumping facilities of the water department.

ALBANY, N. Y.—The following bids were received April 16 by Isidore Wachsman, Clk. Bd. of Contract and Supply, City Hall, for intake from Hudson River to pumping station: Driscoll & Lane, Syracuse, N. Y., $48,946; M. F. Dollard, Albany, $44,169; Besch & Beebe, Utica, N. Y., $51,378; Cameron-Hawn Realty Co., $41,572; Mulderry Bros., Albany, $49,230.

WHITE PLAINS, N. Y.—Plans have been submitted by John F. Farley for the construction of a reservoir to hold 125,000,000 gallons, the estimated cost of which is $60,000.

CENTRAL VALLEY, N. Y.—Bids are asked by Richard Ficken, Central Valley, for excavating for a 3-acre lake. (Advertised, Engineering News.)

UTICA, N. Y.—The Consolidated Water Co., of Utica, has let contract to the AMBURSEN HYDRAULIC CONSTRUCTION CO., of Boston, Mass., for a concrete-steel dam across Black Creek, near Poland, N. Y.

NEW YORK, N. Y.—Bids are asked until May 2 by William B. Ellison, Comr. of Water Supply, Gas and Electricity, 21 Park Row, New York City, for constructing Canarsie Pumping Station near Ave. D.

BAYONNE, N. J.—Bids are asked until 8 p. m., May 1, by the council for furnishing 20 1-in. and 80 ⅝-in. water meters. (Advertised, Engineering News.)

CAPE MAY, N. J.—Bids are asked until 8 p. m., May 4, by the city council for constructing part of water supply system. De Witt D. Barlow is City Engr.; L. Ware is Pres. of Council. (Advertised, Engineering News.)

PHILADELPHIA, PA.—Major Gillette states that the plans for finishing the Torresdale filter plant are about complete, and that bids probably will be advertised for on or about April 26. A contract is to be let for distributing mains, to cost about $1,750,000.

PITTSBURG, PA.—Bids are asked until April 27 by the City Comptroller for furnishing a number of supplies for the water-works.

NORFOLK, VA.—An extension of water mains to exhibition grounds at Sewell's Point is under consideration, and $60,000 has been appropriated by the city for that purpose.

EMPORIA, VA.—We are officially advised that plans and specifications for the construction of a sluice dam for the Greensville Water Power Co., as noted in our issue of March 29, are nearly completed, and that bids will be asked about May 1.

CHATHAM, VA.—Bids are asked until May 18 for the construction of a 94,000-gallon steel stand-pipe, on a masonry foundation. J. N. Ambler, Designing Engr., Salem, Va. J. H. Hargrave, Jr., Mayor. (Advertised, Engineering News.)

DURHAM, N. C.—Extensive improvements will be made at the pumping station of the Durham Water Co. A 1,500,000-gallon pump and a 150-HP. engine and an electric motor are to be installed.

COLQUITT, GA.—The city council has let contract for installing a complete system of water-works to I. KWILECKI, of Bainbridge, Ga.

DAWSON, GA.—We are officially advised that bids are asked until 10 a. m., May 2, for machinery as follows: One 73-in. x 18-in. high-pressure boiler with straight up stack; one 1,000,000-gallon compound pump, 125 lbs. pressure with 90 lbs. steam; one cross compound duplex air compressor about 370 ft. of air per minute, of 65 lbs. pressure. For specifications call on J. R. Mercer, Mayor, Dawson; or on J. B. McClary, Engr., Atlanta, Ga.

TUSCALOOSA, ALA.—See under Light and Power.

MOSS POINT, MISS.—Plans are reported to be complete for the establishment of water-works here. The water supply will be obtained from artesian wells. Judge O. Randall is at the head of the movement.

BRISTOL, TENN.—It is reported that this town will join with Bristol, Va., in an arrangement to bring water from White Top Mountain, a distance of about 30 miles. The estimated cost is $600,000. Council has voted for the purchase of five acres of land on White Top for reservoir purposes.

COLUMBIA, TENN.—A company has been organized, with Paul Azeill president, for the construction of water-works here.

PERRYSBURG, O.—Bids are asked until noon, May 7, by the Board of Trustees of Public Affairs for trenching, pipe laying, etc., for the proposed water-works here. The Riggs & Sherman Co., Nasby Building, Toledo, O., are Engrs.; R. R. Hartshorn is City Clk. (Advertised, Engineering News.)

CINCINNATI, O.—The following contracts have been granted to the KIRCHNER CONSTRUCTION CO., of this city: Laying 60-in. pipe from Western pumping station to Broad St., $69,389; laying pipe from Broad St. to Martin St., $56,400.

Bids which were to have been received May 1 for the construction of a head house, etc., have been extended to May 8.

CADIZ, O.—The Board of Public Service has awarded to RIGGS & SHERMAN, of Toledo, contract for planning and superintending construction work of water-works plant here.

HAGERSTOWN, IND.—The Town Board has decided in favor of a water-works plant, to cost about $15,000.

COLUMBUS, IND.—Bids are asked until 8 p. m., May 21, by George Nowald, City Clk., for constructing a wooden infiltration galley, 214 ft. long, in White River. (Advertised, Engineering News.)

EVANSVILLE, IND.—The Board of Public Works is preparing to ask for bids for the construction of a sewer in Second Ave., a sewer in and along the alley extending east and west in Block 7, in Woodlawn, and a sewer in Garfield Ave. W. F. Wonderlick is City Clk.

ALMA, MICH.—The city has voted $16,000 for water-works extension.

MUSKEGON HEIGHTS, MICH.—Bids are asked until 2 p. m., April 30, by Alexander Van Zantine, City Recdr., for the construction of a water plant, with two 1,000,000-gallon pumps, steel stand-pipe, and about seven miles of pipe, with specials for same. R. J. Hosner is Engr. (Advertised, Engineering News.)

MAYVILLE, WIS.—Bids are asked until April 30 by the council for the construction of a complete water-works system here.

WAUKESHA, WIS.—An election has been held to vote on the proposition of bonding the city for $70,000 for a municipal water-works plant, and the proposition was carried by a very large majority. John P. Dey is City Engr.; M. L. Snyder is Mayor.

WEBSTER CITY, IA.—It is proposed to erect a dam on the Boone River, to cost about $7,000, for the electric light plant, which will be operated by water instead of steam. S. C. Green is Mgr.

KANSAS CITY, KANS.—It is reported that a 30-year franchise has been granted to L. M. Miller and J. M. Brown for the construction of a water system here.

LINCOLN, KANS.—Contracts for installing water system and electric light plant have been let.

ELK CITY, KANS.—Bids are asked until 1:30 p. m., May 11, for all necessary material and labor to build a water-works system, at a cost of about $25,000. M. A. Earl & Co., Muskogee, Ind. T., are Engrs.

PRAGUE, NEB.—At a recent election a proposition to issue bonds amounting to $5,000 for a water-works plant here was carried.

OSCEOLA, ARK.—A test well has been sunk here at a cost of $3,344, and has proved successful. We are officially advised that the city will now proceed with construction of the contemplated water-works system, at a cost of about $31,500. L. A. Morris is Secy. Bd. Pub. Impvts.

SHERMAN, TEX.—The mayor and council have authorized the purchase of 10,000 ft. of pipe for water-works extension.

GUTHRIE, OKLA.—The Secretary of the Interior has authorized the purchase and installation of the necessary pumping plant, including a 6-in. centrifugal pump and a 25-HP. gasoline engine, for the purpose of investigating the feasibility of using the waters of the Red River for an irrigation project in Oklahoma. The estimated cost of the plant is $3,000. Owing to the presence of considerable quantities of salt in the waters of this stream, it is deemed best to experiment on a small scale before initiating a large gravity system.

MARIETTA, IND. T.—See under Light and Power.

BOULDER, COLO.—The city engineer estimates the work to be done, in building the mountain extension of the North Boulder intake, and the extension of the South side system to Chautauqua, to cost about $196,000.

ARTESIA, N. MEX.—At a special election the town voted the issuance of $50,000 water-works bonds. Address the Mayor for information.

ROSALIA, WASH.—The permanent survey for the Rosalia water system has been completed and Prof. W. J. Roberts, of Pullman, who is in charge of the work, is making plans and specifications.

SPRINGFIELD, ORE.—We are officially advised that the city has granted a franchise to the Willamette Valley Electric Co. to put in and operate a water system at Springfield. R. A. Jayne is Mayor.

PORTLAND, ORE.—See under Miscellaneous Contracts: Storage Works.

PASADENA, CAL.—It is reported that the Wakiva Land & Water Co. has been incorporated, with a capital of $10,000 by H. L. Story and others.

SAN FRANCISCO, CAL.—The Bay Cities Water Co. intends to erect an immense masonry dam at Beals Bar in order to supply power to a company of Boston capitalists, which is interested in the scheme to the amount of $40,000,000, and which will install an electric plant at this point. The main reservoir of the company will be located in Sly Park, above Placerville.

SANTA CLARA, CAL.—The municipal pumping plant here, which has been ten years in service, is to be extended. C. E. Moore, Engr.

SALT LAKE CITY, UTAH.—The following bids were received April 11 for 34,000 ft. pipe: J. W. PERCIVAL, Omaha, $17,215 (contract awarded); P. J. Moran, $52,428; Midgley Bros., $55,842; James Kennedy, $57,231; Hanley & Ritchie, $59,245; N. S. Sherman Mfg. Co., $60,410.

REXBURG, IDAHO.—The contract for installing water system here for the municipality has been let to the WHEELWRIGHT BROS. CONSTRUCTION CO., of Ogden, Utah, at $[illegible],000.

POTLATCH, IDAHO.—It is reported that the Potlatch Lumber Co. will put in a water system here. C. Ferris White, Arch., of Spokane, Wash., is preparing plans, estimated cost, $100,000. A. W. Laird, of Palouse, Wash., is Mgr.

FORT WILLIAM, ONT.—We are officially advised that $125,000 is to be spent this summer on water-works, and contracts will be let in five or six weeks. Contracts for a second portion, including 4,500 ft. of tunnel, will be let in the autumn, providing a by-law permitting this to be done is passed. H. S. Hancock, Jr., is City Engr.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

MILFORD, MASS.—A sewer system, estimated to cost about $300,000, is to be built here, and Snow and Barbour, Civil Engrs., are now making the plans.

SALEM, MASS.—The Sewerage Commission has awarded contract for building parts of trunk sewer to PITMAN & BROWN.

BEVERLY, MASS.—The contract to build sewers on Water, Cabot, Congress, Porter and River Sts., and Webber Ave., was awarded by the Committee on Sewers to A. TOMASELLO; and on McKinley Ave., to M. GRADEY & SON, of Beverly.

MELROSE, MASS.—See under Water Supply and Irrigation.

WOONSOCKET, R. I.—About 3¼ miles of sewers will be laid during the coming summer, on Cass and Wood Aves., and Front and Bernon Sts., at an estimated cost of $6,000. Frank H. Mills is City Engr.

NEW BRITAIN, CONN.—We are officially advised that the following is a list of the bidders and the total amount of each bid, on sections (1) "E" and (2) "F," of the proposed sewer system, for which bids were received on April 10, as advertised in Engineering News: Falvey & Kelly, Somerville, Mass., (1) $38,370, (2) $24,332; Joseph H. Clements & Son, Schenectady, N. Y., (1) $39,617; Unique Const. Co., Brooklyn, N. Y., (1) $31,034, (2) $24,229; Fred T. Ley Co., Springfield, Mass., (1) $31,686, (2) $29,005; M. E. Pierson, Bristol, Conn., (1) $29,217, (2) $17,612; Suzio Conti Co., Meriden, Conn., (1) $30,655, (2) $21,785; Long & Little, Leominster, Mass., (1) $37,600, (2) $23,465; Caposta & Leroy, New Britain, Conn., (1) $37,096, (2) $27,965; Bruno, Salome & Petitti, Boston, Mass., (1) $44,345, (2) $25,749; Henry Spinach, Naugatuck, Conn., (2) $18,-819; Frank H. Cowin Co., Boston, Mass., (2) $25,960; Edw. Tracy, Derby, Conn., (2) $17,491. The contract for Section "E" was awarded to M. E. PIERSON; contract for Section "F," to EDWARD TRACY.

HARTFORD, CONN.—Contracts have been let for construction of sewers on several streets; estimated cost, $16,854.

The construction of the Windsor Ave. system, to cost about $55,307, has been authorized and bids will be asked for shortly.

NORWICH, N. Y.—Plans and specifications for sewers to be built, as advertised in the Engineering News, April 19 and 26, are on file at office of Engineering News, New York. Bids to be opened 4 p. m., May 4.

IRONDEQUOIT, N. Y.—The Town Board has voted to construct a sewer at Windsor Beach and Summerville. Charles Salmon, E. O. Graham and J. E. Summerhays are the committee in charge.

BINGHAMTON, N. Y.—The City Engineer has completed plans for the enlargement of the sewer system here.

OSWEGO, N. Y.—The Department of Public Works has awarded the contract for sewer construction to the BARNETT CONTRACTING CO.

CORTLAND, N. Y.—The contract to build 11,800 ft. sewers here has been awarded to SAMUEL BONN, Syracuse, N. Y., at $11,800. E. L. Becker is official in charge.

FAR ROCKAWAY, N. Y.—Bids are asked until 11 a. m., April 30, by Joseph Bermel, Pres. Boro. Queens, for furnishing and delivering one 100-HP. horizontal boiler and fixtures for sewage disposal plant here.

PLAINFIELD, N. J.—Bids are asked until 8 p. m., May 7, by the Common Council for the construction of sanitary sewers, including 12,844 ft. of 8-in. pipe. Andrew J. Gavett is City Surv. Plans, specifications and blank proposals for this work are on file at office of Engineering News, New York. (Advertised, Engineering News.)

GUTTENBERG (Weehawken post-office), N. J.—Bids are asked until May 5 by Harry R. Prosser, Town Engr., for construction of a sewer in Herman Ave.; estimated cost, $20,000.

ALTOONA, PA.—Bids are asked until 7 p. m., May 2, by the Board of Public Works for construction of pipe sewers, sewer inlets, etc., on 19th St. and Washington Ave.

Bids are asked until 7 p. m., May 9, by Board of Public Works for storm and district sewer construction. George W. Kuebler is Chn. Bd. Pub Wks.

MOUNT CARMEL, PA. — WILGOTT KLINGBERG, of Kingston, has contract to build a sewer system here, at $80,000.

PITTSTON, PA.—JOHN McGRATH, of this city, has contract for laying new sewer in the Borough of Exeter.

ROANOKE, VA.—We are officially informed that B. R. McGHEE & CO. have been awarded contract for construction of sewers here, at $16,937. Other bidders were: Carpenter & Boxley, $25,946; C. Markley, $18,424. W. B. Bates is City Engr.; W. E. Thomas is City Clerk.

FRANKLIN, VA.—THE SOUTHERN CONTRACTING CO., of Norfolk, Va., has been awarded the contract for constructing sewer and water-works systems here, at $34,019. Other bidders were McCoy Eng.

Co., Baltimore, Md., $38,000; Brooks & Fritz, York, Pa., $36,677; Newport News Co., Newport News, Va., $33,931; Thomas A. Barry & Co., Richmond, Va., $38,366; Spinner & Co., New York, N. Y., $35,350; W. G. Morris, Phoebus, Va., $37,000; Derby Paving Co., Norfolk, Va., $16,586 (waterworks only). Charles S. York, 1526 East Biddle St., Baltimore, Md., is Engr.

LAKE CITY, S. C.—The city has voted to issue $20,000 in bonds for the construction of a sewer system. E. W. Yates, B. W. Stewart and M. D. Nesmith will have charge of the work.

PENSACOLA, FLA.—Bids are asked until June 1, for constructing sewer system here. We are officially informed that bids asked for same work on previous occasion were rejected, they being above the appropriation. T. Chalkey Hatton, Wilmington, Del., is Consult. Engr.

BIRMINGHAM, ALA—It is reported that SULLIVAN & LONG, of Bessemer, Ala., have contract to build sanitary sewer here, at $27,000. P. S. Milner is City Engr.

KNOXVILLE, TENN.—Plans and specifications are now being prepared for storm sewer from junction Central St. and Broadway to West Fifth Ave. W. C. Crozer is City Engr.

PADUCAH, KY.—We are officially advised that bids will be asked in about two months for construction of about ten miles of sewers. S. A. Washington is City Engr.; John W. Alvord, Chicago, Ill., is Des. Engr.

PORTSMOUTH, O.—The Board of Public Service has awarded to SAMUEL P. BAIRD, the contract to build the Robinson Ave. storm sewer. Benjamin Bratt is City Engr.

RAVENNA, O.—Bids are asked until May 15 by E. W. Marcin, Village Clk., for furnishing pipe for and constructing 13½ miles of sewers.

MARION, O.—The contract to install a storm sewer and cellar drain on Pennsylvania Ave., from Church St. to Indiana Ave., has been awarded to W. E. FRYE. William Fies is Clk. Bd. Pub. Service.

WARREN, O.—SMITH & McGLASHAM, of this city, have the contract for sewers and paving Washington and Scott Sts. E. M. Milligan is City Engr.

ALLIANCE, O.—MYERS & PERRY, of Canton, O., have the contract to build about 1,800 ft. of sanitary sewer here.

SALEM, O.—B. Morris French, City Engr., is preparing plans for the proposed trunk line sewer here.

PAINESVILLE, O.—Bids are asked until April 30 by Board of Public Service for about 3,500 ft. of 15 to 20-in. sewer. H. P. Cummings is City Engr.

CLEVELAND, O.—The County Building Commission here has authorized its secretary to ask for bids for deflecting the large Ontario St. sewer; estimated cost, $17,000. William H. Evers is County Engr.

YOUNGSTOWN, O.—The contract for the Falls Ave. sewer here has been awarded to ANTHONY O'HORO; and for the Garfield St. sewer to ROCHFORD & COMINSKY. F. M. Lillie is City Engr.

WOODVILLE, O.—Bids are asked by the Village Council for construction of about 6,000 ft. sewers; estimated cost, $10,000. J. C. Overmyer, Fremont, O., is Engr.; Otis Bittinger is Village Clk.

ASHTABULA, O.—Contract for construction of sewer in West Camp St. has been given to PULLMAN & STARWEATHER, of this city.

MISHAWAKA, IND.—RANKERT & EGGLESTON have the contract for constructing a lateral sewer from East Broadway to Chestnut St. F. X. Ganser is City Engr.

ELKHART, IND.—Bids are asked until 10 a. m., May 11, by Emil V. Anderson, City Clk., for the construction of about 4,500 ft. sewer from 20 to 30 ins. in diameter.

FORT WAYNE, IND.—ANTON RIEG, city, has been let the contract for the Wells St. sewer.

HUNTINGTON, IND.—PHILIP HIPSKIND & SON, of Huntington, have contract for constructing sewer in Henry St.

BAY CITY, MICH.—The contract to build the Park Ave. sewer has been awarded to DONOHUE & WOLFE, here. George Turner is City Engr.

LANSING, MICH.—The contract to construct 250 ft. sewer in Butler St. has been awarded to J. H. ALGATE.

ANN ARBOR, MICH.—LAMBERT DRESSELHOUSE and HUTZEL & CO., here, have the contract for constructing sanitary sewers here.

GRAND RAPIDS, MICH.—KLOOTE & VANDER VEEN have been awarded the contract for rebuilding the Pleasant and Sherman St. sewers for $15,900.

MUSKEGON, MICH.—A. C. SCHREITER CO., of Waukegan, has been awarded the contract for the Jackson St. sewer, at $13,125.

PANA, ILL.—We are officially advised that a sewer contract, noted in our issue of April 5, will be let in about forty days. Estimated cost of work $30,000. R. L. Hubarger is City Clk.

SAVANNA, ILL.—We are officially informed that the city of Savanna, Ill., is considering the construction of a sanitary sewer system soon. W. H. Griffith is Mayor; J. J. Nickles is City Clk.; J. P. Plattenberger is Comr.

ELGIN, ILL.—We are officially advised that about 20 miles of concrete and pipe sewers will be put in here. Ordinances for part of this work are passed, and the balance will be passed within a few days. Bids for contracts will be advertised for in a short time. Henry Dakin is City Engr.

CHAMPAIGN, ILL.—Bids are asked until May 1 by C. D. Stevens, City Clk., for about 1½ miles of pipe sewer extension. G. C. Fairclaw is City Engr.

CAIRO, ILL.—The City Engineer estimates that the big Commercial Ave. sewer will cost about $83,800.

LINCOLN, ILL.—It is reported that bids will be received in about a month for the construction of 1,200 ft. of vitrified tile sewer.

JACKSONVILLE, ILL.—Bids are asked until May 8, by the Board of Local Improvements, for constructing about 18,600 ft. of 10, 12 and 15-in. sewers, 53 manholes, 31 catch basins and specials. J. L. Smetters is City Engr.

BELLEVILLE, ILL.—Bids are asked until May 8 by Board of Local Improvements for construction of an intercepting sewer, including 19,680 ft. various sized pipe. L. L. Harper is City Engr.; Fred. J. Kern is Pres. (Advertised, Engineering News.)

MAYVILLE, WIS.—Bids are asked until 1 p. m., April 30, by Byron Barwig, Mayor, for furnishing material and labor.

LINCOLN, WIS.—FRANK KAMINSKI, city, has the contract to lay 4,500 ft. of sewer in Watertown, Wis.

SHEBOYGAN, WIS.—The contract to build the North Seventh St. sewer was awarded to OTTO JUNCK.

OSHKOSH, WIS.—Bids are asked until noon, May 14, by Board of Public Works for building sewer in Pearl St. George H. Randall is City Engr.

ANAMOSA, IA.—Bids will be received by the City Clk. for 12-in. pipe and a quantity of curbing.

DES MOINES, IA.—O. P. HERRICK, 3318 Bowman St., has contract, it is reported, for a 12-in. vitrified clay sewer on East Seventh St., from Allen St. to Des Moines River, and on West 12th St., 728 lin. ft. J. W. Judd is City Engr.

We are officially advised that contract for laying 12-in. and 18-in. sewers, 3,150 ft. in length, on Arlington Ave. and Prospect Boulevard, has been let to DAY & SMITH, East Fifth and Walnut Sts., Des Moines.

CEDAR RAPIDS, IA.—Contracts have been awarded for the construction of storm sewers on C Ave., at $5,000.

DAVENPORT, IA.—The following bids were opened April 17 for the building of sewer on Locust St.: Hydraulic Construction Co., 74½ cts.; People's Construction Co., 74½ cts.; Independent Construction Co., 95 cts.

For building sewer on Fair Ave.: Hydraulic Construction Co., 84 cts.; People's Construction Co., 79½ cts.; Independent Construction Co., 90 cts.

ATLANTIC, IA.—WILLIAM CRISTY, of Red Oak, Ia., has contract for construction of sewers here.

KNOXVILLE, IA.—It is reported that the council has passed a resolution to construct about a mile of 8 to 12-in. sewer. Bids will be asked for in about a month. W. S. Bilby is Mayor.

AMES, IA.—R. C. DE LA HUNT, of Cedar Rapids, Ia., has the contract, it is said, for constructing new sewers here.

ST. PAUL, MINN.—It is reported that the city proposes to have plans prepared for a sewer on University Ave., from Hamilton to Milton; estimated cost, $9,905.

PIPESTONE, MINN.—Bids are asked until May 12 by S. W. Funk, City Recdr., for construction of sewers. Bids asked for same work on previous date have been rejected.

IOLA, KANS.—Wm. Boyd, of the BOYD CONSTRUCTION CO., of Kansas City, Mo., has secured contract to build sewer in Seventh District, here.

FAIRBURY, NEB.—Adna Dobson, State Engr., of Lincoln, Neb., is preparing specifications, it is reported, for sewers, to cost about $10,000. F. L. Rain is City Clk.

ST. CHARLES, MO.—There will be about $80,000 spent in the construction of a first-class sewer system here.

EAST ST. LOUIS, ILL.—The contract to build about 4,000 ft. of 12 and 10-in. sewer here has been let to McCABE & CO. W. J. Croken is City Engr. and has charge of the work.

ST. JOSEPH, MO.—The Board of Public Works has passed resolutions providing for the construction of sewers in a portion of Sewer District No. 71.

FORT SMITH, ARK.—See under Streets and Roads.

FORT SAM HOUSTON, TEX.—Bids, in triplicate, are asked until 11 a. m., May 2, by L. J. Fleming, Const. Q. M., for construction of water and sewer connections and drains required for new post hospital.

DALLAS, TEX.—The improvement of sewers is under consideration here.

TACOMA, WASH.—An ordinance has been passed ordering the construction of a sanitary sewer on North Fifth St.; estimated cost, $3,094.

ELLENSBURG, WASH.—The Council has authorized the construction of new sewers.

SEATTLE, WASH.—We are officially advised that the following bids were received for sewering Eastlake Ave., etc.: Puget Sound Bridge & Dredging Co., 95 Yester Way, Seattle, $115,892; Sanfield & Co., Seattle, $127,479; F. McLellan & Co., 435 Burke Block, Seattle, $141,302; STIRRAT & GOETZ, 602 Bailey Bldg., Seattle, $107,531 (contract awarded). R. H. Thomson is City Engr.

ONTARIO, ORE.—Bids are asked until 6 p. m., April 30, by C. T. Noe, City Recdr., for construction of complete sewer system; length, about 8,000 ft.; estimated cost, $26,000.

ASHLAND, ORE.—The city will advertise for bids shortly for laying about 2,800 ft. of 6 and 8-in. sewer pipe, estimated cost 60 cts. a ft. J. A. McCall is Acting City Engr.

TUCSON, ARIZ.—The city council has passed an ordinance providing for the construction of a new sewer in McCormick St. here.

SALT LAKE CITY, UTAH.—The following bids were received by the Board of Public Works for 79,000 ft. sewer pipe; JAMES KENNEDY, Fargo, N. Dak., $81,364 (contract awarded); P. J. Moran, $91,165; Hanley & Ritchie, $95,570; N. S. Sherman Mfg. Co., $114,070.

NEW WESTMINSTER, B. C.—The necessary authority has been given to the water and sewer committee, by the city council, to immediately commence the Fourth St. sewer.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

ALBANY, N. Y.—Bids are asked until 11 a. m., May 1, by Richard O'Brien, Acting Supt. of Pub. Bldgs., for removing from public buildings and premises of the State of New York, in Albany, all ashes, rubbish, etc., for year ending May 1, 1907.

Bids are asked until 11 a. m., May 1, by Richard O'Brien, for sprinkling streets, abutting the public buildings of the State of New York, at Albany.

NEW YORK, N. Y.—Bids are asked until noon, May 8, by George Cromwell, Pres. Boro. of Richmond, for sprinkling certain highways in Borough of Richmond, N. Y.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

COLEBROOK, N. H.—Bids are asked until 6 p. m., May 5, for constructing a gravel road. We are officially advised that the estimated cost is $1,900. A. W. Dean, Concord, N. H., is State Engr.

BOSTON, MASS.—We are officially informed that on April 23 COLEMAN BROS., 15 Court St., Boston, were awarded contract for paving and regulating Bennington St., East Boston, at $10,679. William Jackson is City Engr.

LENOX, MASS.—It is reported that W. H. MAGUE, of West Newton, Mass., has been awarded contract for building macadam road here.

QUINCY, MASS.—The lowest bid received April 23, for grading, surfacing, etc., at Furnace Brook Parkway, from Adams St. to Blue Hill Reservation, was $27,714, sent by Hugh Nawn Construction Co.

DIGHTON, MASS.—The town has voted an appropriation of $5,000 for macadamized roads and to buy a stone-crusher.

HUDSON, MASS.—The proposition to have paving done here on Main St. was put to vote and carried.

WOONSOCKET, R. I.—Bids are asked until 4 p. m., May 9, by Stephen Magown, Chn. Com, on Sts. and Bridges, for laying stone pavement on Railroad St., from Main to Arnold Sts. Frank H. Mills is City Engr. (Advertised, Engineering News.)

EASTHAMPTON, N. Y.—Bids are asked until 2 p. m., May 2, by the Commissioners of Highways, for the improvement of about 19 miles of road. (Advertised, Engineering News.)

NEW YORK, N. Y.—The following bids were received by John F. Ahearn, Pres. Boro. Manhattan, April 18, for repairing and maintaining asphalt pavements in this borough: Barber Asphalt Paving Co., 114 Liberty St., $152,425; Uvalde Asphalt Paving Co., 1 Broadway, $128,750; Sicilian Asphalt Paving Co., $195,750.

NEW YORK, N. Y.—J. A. Bensel, Comr. of Docks, received the following bids for repairing asphalt pavement on East and North Rivers April 24: Uvalde Asphalt Paving Co., 1 Broadway, $124,000; Barber Asphalt Paving Co., $123,500; Sicilian Asphalt Paving Co., $150,000.

CRANFORD, N. J.—Orchard St. and Springfield, Orange and Centennial Aves. are to be macadamized. These roads make, in all, about two miles.

NEW BRUNSWICK, N. J.—The contract for macadamizing Seminary Pl., has been awarded to the MIDDLESEX CONSTRUCTION CO., George St., New Brunswick, at $2,487.

BEESLEYS POINT, N. J.—Plans have been made for the Sea Isle Turnpike. We are officially advised that bids will be asked for in a short time. Anthony B. Smith is Dir. of Bd.

NEW BRUNSWICK, N. J.—We are officially informed that Somerset, Prospect, Snydam and Hardenburg Sts., and Codwise Ave., are to be paved, amounting to about 20,000 sq. ft., estimated cost $60,000. Fred C. Schneider is City Engr.

BUTLER, PA.—It is reported that the contract for paving and curbing on Munro St. has been awarded to JOHN SCHAFFNER, here. H. E. Coulter is Secy. Boro. Council.

HARRISBURG, PA.—An ordinance has been passed for resurfacing four blocks on Walnut St. with sheet asphalt at a cost of about $3,000.

PHILADELPHIA, PA.—It is reported that about $2,500,000 will be expended on a main state road between Pittsburg and this city.

The construction of a boulevard from Logan Sq. to Fairmont Park has been approved by the Board of City Surveyors. About $2,000,000 is ready for use for this work. George S. Webster is Ch. Engr., Bureau of Surveys.

BRADFORD, PA.—THOS. FITZGERALD, Fredonia, N. Y., has been awarded the contract for paving Congress St. with vitrified brick, at $12,887. Other bidders were: F. V. E. Bardol, Buffalo, $13,401; R. C. Ruthven, Buffalo, $13,388, and Eugene Peake, 15 West Washington St., Bradford, $13,634. Bids for paving High St. were as follows: F. V. E. Bardol, $10,829; R. C. Ruthven, $11,145, and Eugene Peake, $10,528. A. F. Bannon is City Engr.

CUMBERLAND, MD.—The City Council has passed an ordinance to pave Maryland Ave., from Harrison St. to Oldtown Road.

BALTIMORE, MD.—The Board of Awards opened bids April 18 for paving [illegible] 25th St. Bids were as follows: Maryland Pavement Co., on asphalt blocks, $2.65 a sq. yd.; F. E. Snyder, on vitrified brick, [illegible]; Daniel Sullivan, on bitulithic, $2.35; Warren Bros. Co., of Boston, on bitulithic, [illegible]; J. F. Gantz, on vitrified brick, $2.0[illegible]; Barber Asphalt Co., on asphalt, $1.84. The specifications called for bitulithic pavement, which is a patented article, and all but Warren Bros. Co., and Daniel Sullivan bid on their own specifications. Contract was awarded to WARREN BROS. CO.

NORFOLK, VA.—The City Council has decided that Main, Queen, Moore and Alexander Sts. and two lanes are to be paved, at an expenditure of about $[illegible].

ROANOKE, VA.—We are officially advised that B. R. McGHEE & CO. have contract for grading, guttering and macadamizing portions of Highland and Albemarle Aves. and Roanoke and Nelson Sts.; VAUGHAN CONSTRUCTION CO. has contract for grading, guttering and macadamizing Mountain, Center, Loudon, Gilmer and Patton Aves. and Sixth and Twelfth Sts.; C. MARKEY for grading and guttering Walnut and Chapman Aves.; JOSEPH ABBOTT & SON, for grading and guttering portions of Albemarle and Highland Aves.

COLUMBUS, GA.—The following bids were received by W. C. Campbell, Supt. Pub. Wks., for 60,000 sq. yds. of pavement: Southern Bitulithic Co., Nashville, Tenn., $1.85 per sq. yd.; Southern Paving & Construction Co., Chattanooga, Tenn., $1.77; Barber Asphalt Co., Philadelphia, Pa., $1.75; Robert H. Parker, Birmingham, Ala., $1.72½. Contract for 16,5[illegible] sq. yds. of brick was awarded to R. H. PARKER; contract for 10,000 sq. yds. bitulithic, to SOUTHERN BITULITHIC CO.

SAVANNAH, GA.—Six streets here are to be paved this year by order of the council.

MONTGOMERY, ALA.—Bids are asked until May 7, by the City Treasurer, for paving and otherwise improving 16 different streets. R. I. Williams is City Treas.

MEMPHIS, TENN.—M. J. ROACH has contract to do all grading for the Belvedere Boulevard. H. W. Brennan is Engr. in Charge.

KNOXVILLE, TENN.—Plans for grading Kennedy Sq., Charles St., and L[illegible] Pl. have been completed. W. C. Crozer is City Engr.

NASHVILLE, TENN.—Bids are asked by W. W. Southgate, City Engr., for paving; estimated cost, $135,000.

MARION, O.—Two streets are to be paved with Trinidad Pitch Lake Asphalt, and work will be done on about 3,425 sq. yds.

WARREN, O.—See under Sewers.

DAYTON, O.—Bids are asked until May 1, by the Board of Public Service, for paving about 11,700 sq. yds. on Western Ave., and for curbing, also for grading, etc., on Kammer Ave. Robert E. Kline is City Engr.; William F. Miller is Clk. Bd. Pub. Service.

CINCINNATI, O.—It is reported that Glenway Ave. will have 6,072 ft. brick pavement. The cost is figured at $12.08 a lin. ft.

LEBANON, O.—It is reported that F. M. KEMP & SONS, of Middletown, O., have contract for constructing about 30,000 sq. ft. cement sidewalk. M. E. Gustin is Clk.

ZANESVILLE, O.—Bids are asked until May 1, by the Board of Public Service, for about 5,000 sq. yds. of paving on Muskingum Ave. E. H. Smith is City Engr.

WESTERVILLE, O.—Bids are asked until May 12, by the Village Council for paving several streets here. C. O. Sprague is Village Clk.

RICHMOND, IND.—Bids are asked until May 2, by the Board of Public Works, for the improvement of several streets, and the construction of cement roadways. Joseph S. Zeller is Chn.

EVANSVILLE, IND.—The Board of Public Works has ordered improvements on the following highways: Park, Putnam, Oakley, Columbia and Pennsylvania Sts. and Garfield Ave.

INDIANAPOLIS, IND.—Blaine H. Miller, City Engr., has been instructed by the Board of Public Works, to prepare plans and specifications for paving 30th St. from Meridian to White River.

RIVER PARK, IND.—Bids are asked until 7.30 p. m., April 30, by Charles I. Witsaman, Clk., Bd. of Trustees, for improving Pleasant and 18th Hts. W. S. Moore, City Hall, Mishawaka, Ind., is Engr.

RICHMOND, IND.—The contract for constructing sidewalks of cement on North C St., was awarded to A. A. TURNER at 55 cts. a lin. ft. The contract for cement sidewalks on North 13th St. has been awarded to J. H. A. SCHNEIDER, at 67 cts. a lin. ft.

RENSSELAER, IND.—We are officially advised that contract to construct 20,800 ft. stone road in Marion, Jordan and Carpenter Townships has been let to A. G. KING & CO., of Bluffton, Ind., at $12.537. James Leatherman is Audr., Jasper County.

MENOMINEE, MICH.—The contract for paving about 11,500 sq. yds. of street with brick is reported to have been let to JOHN STIFFLER, Marinette, at $1.86½. ROBERT RICK, of Menominee, is said to have contract to macadamize about 10,700 sq. yds., at 65 cts.

GRAND RAPIDS, MICH.—The Board of Public Works has awarded the contract for paving Stocking St. with brick to LEONARD SCHNEIDER, at $30,100.

NORMAL, ILL.—J. G. Melluish, of Bloomington, Ill., it is reported, will advertise for brick paving here, to cost about $[illegible], on or about June 1.

DES PLAINES, ILL.—Bids are asked until 7 p. m., April 30, by Board of Local Improvements, for grading, etc., Ellinwood St., from Lee St., to Des Plaines Ave. L. G. Held is Secy.

URBANA, ILL.—Bids are asked until May 6, for constructing 19,000 sq. yds. of brick pavement on concrete foundation. J. W. Royer is City Engr.

CHICAGO, ILL.—The City Council here has let the contracts to the R. F. CONWAY CO., the BARBER ASPHALT PAVING CO., and the JAMES A. SACKLEY CO., for street paving to the amount of $306,754.

MATTOON, ILL.—It is reported that bids will be asked for, to pave 15 blocks of street, about May 1. Claude L. James is City Engr.

WHEATON, ILL.—The town has decided to put down several miles of pavement here at a cost of about $225,000.

ALTON, ILL.—We are officially informed that contracts are being let as fast as possible for the paving of streets here, 25 of which will have work done on them. The paving is done with vitrified brick. Thomas Lang is City Engr.

LA CROSSE, WIS.—We are officially advised that the contract for paving Jackson St. was let to WOOBY & HAMON, 230 South 16th St., at $9,557. The La Crosse Stone Co., also made a bid of $9,741. Arthur Robugo is Clk. Pub. Wks.

Contract for macadamizing five blocks on Caledonia St. will be let June 19.

SUPERIOR, WIS.—We are officially advised that the contract to pave Winter St., as noted in Engineering News April 12, has been awarded to WARREN BROS., Boston, Mass.

WATERTOWN, WIS.—The contract for paving here, has been awarded to THE DUNN KEITH CO., of Marshalltown, Ia., at $50,000.

MUSCATINE, IA.—It is reported that 26 blocks of streets are to be paved with brick.

CEDAR FALLS, IA.—Bids will be asked until about June 6, it is reported, for paving, with vitrified brick, about 18 blocks here. W. H. Werner is Mayor.

OTTUMWA, IA. — Bids are asked until May 7, by W. H. O'Malley for paving Fourth St. with vitrified brick, on concrete foundation.

DES MOINES, IA.—We are officially informed that Christie Construction Co., city, have contract for curbing, with cement, Ascension St. from Fourth to Sixth Sts. George D. Dobson is City Engr.

ST. PAUL, MINN.—The contract for macadamizing Lexington Ave. was awarded to GLEASON BROS., at $13,990.

KANSAS CITY, KANS.—Bids are asked until May 1 for paving Adams St. George Foerschler, Jr., is City Clk.

ANACONDA, MONT.—Bids are asked until June 4 by Clerk of Deer Lodge County for grading, etc., public highway at Ralston's Ranch. Harvey A. Neil is County Clk.

FORT SMITH, ARK.—We are officially informed that the city of Fort Smith, Ark., will soon begin extensive improvements of its sewers and streets. Merle H. Reed is City Engr.

DALLAS, TEX.—A permit to do business in this state has been granted to the Texas Bitulithic Co., of Boston, Mass., incorporated under the laws of West Virginia. Its capital is $300,000, and the company proposes to engage in the construction and maintenance of roads and bridges in connection with a general street paving business. The Texas office is to be maintained at Dallas.

WENATCHEE, WASH.—WM. GAVIN, of Cashmere, has been awarded the contract for constructing the Red Mountain road.

SEATTLE, WASH.—BELL, PRICE & CO. have secured the contract for constructing a mile of government macadam road, at $12,700.

TACOMA, WASH.—We are officially informed that 36,000 sq. yds. asphalt pavement will be laid in Sixth Ave., at an estimated cost of $120,800; and 37,000 sq. yds. asphalt will be laid in East St., at estimated cost of $122,000. Frank L. Davis is City Engr.

WALLA WALLA, WASH.—The lower Milton road is to be macadamized and the county will let contract for the work, it is reported, to parties from College Place.

STOCKTON, CAL.—N. E. BURRES was awarded the contract for macadamizing Lincoln St. from Magnolia Ave. to Rose St. Newton Rutherford is City Clk.

WATSONVILLE, CAL.—Bids are asked until 10 a. m., May 7, by Supervisors of Santa Cruz County for reducing grade on County road approaching Corralitos Bridge. H. H. Miller is Clk.

OGDEN, UTAH.—Bids are asked until 2 p. m., April 28, by A. F. Parker, City Engr., for all curbs and gutters to be built during 1906.

We are officially informed that the following bids were received April 24 by A. F. Parker, City Engr., for building all cement sidewalks: J. P. O'Neill, (a) concrete work, per sq. ft., 12 cts.; (b) grading, per cu. yd., 45 cts.; (c) filling, per cu. yd., 50 cts. Wheelwright Construction Co., (a) 12¾ cts.; (b) 46 cts., (c) 70 cts. The contract has been awarded to J. P. O'NEIL.

SALT LAKE CITY, UTAH.—The Barber Asphalt Paving Co. submitted the lowest bids which were received by the Board of Public Works on April 11 for paving the following streets: East Temple St. with reinforced concrete curb, at $60,964 (with 5-year guarantee); $62,804 (with 10-year guarantee). State St.: $89,143 (with 5-year guarantee); $92,023 (with 10-year guarantee). First South St.: $45,880 (with 5-year guarantee); $47,400 (with 10-year guarantee). East Temple St., same work with plain concrete curb: $59,976 (with 5-year guarantee); $61,816 (with 10-year guarantee). State St.: $87,870, $90,750 (with 10-year guarantee). First South St.: $45,231 (with 5-year guarantee); $46,751 (with 10-year guarantee).

The bids received at same time for constructing sidewalks were as follows: S. BIRCH, Fargo, N. Dak., $32,270 (contract awarded); R. S. Blese, $92,560; J. P. O'Neill, $92,205; Young & Redman, $96,280; James Kennedy, of Fargo, $106,427; Hanley & Ritchie, $126,445.

CHATHAM, ONT.—We are officially advised that this city, which has about 18 miles of excellently paved streets, will extend its paving this summer. Bitulithic surface on concrete base is much in favor. There are a number of drainage projects under way. There is a demand for tools, street paving material and machinery, cement, brick, iron pipe, tile drain pipe, etc.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

PORTLAND, ME.—It is reported that the Maine Central R. R. Co. is planning to build large additions to its shops at Thompson's Point. The new buildings will be a car shop, 130 × 180 ft., and an addition to the mill plant, 60 × 140 ft. P. N. Watson, Brunswick, Me., is Supt. Bridges and Bldgs.

MILLINOCKET, ME.—The Great Northern Paper Co. is planning the erection of an additional paper mill on the Penobscott River, near here. The probable capacity of the plant will be 150 tons daily.

HOULTON, ME.—The Board of Trade is developing a company to build a wooden mill, which will cost approximately $150,000. Both steam and water-power will be used. M. M. Clark is Pres.

MANCHESTER, N. H.—The McElwain Shoe Co., it is reported, will build a shoe factory, to be completed before fall.

RUTLAND, VT.—It is reported that the J. S. McMaster Co. will erect a factory for the manufacture of excelsior and wood wool. The plant will consist of several buildings.

FALL RIVER, MASS.—H. S. Barnfield, of Pawtucket, is treasurer of a company, just formed, which will erect a 600-loom mill at Fall River and engage in the manufacture of fancy textiles.

HOUSATONIC, MASS. — The Monument Mills Co., of Housatonic, is to build a large addition to its plant. The company will build an addition to Mill No. 1, 84 × 112 ft., five stories high, and a new picker house, 60 × 130 ft., four stories.

CENTRAL FALLS, R. I.—KILBURN, LINCOLN & CO. have been awarded contracts to supply 600 looms and the shafting for the new mill of the Rhode Island Mills Corporation, which is to be erected in Central Falls. H. S. Barnfield, of Pawtucket, is Treas., and Fred W. Easton, of Pawtucket, Pres. The plant will have 20,000 spindles.

PAWTUCKET, R. I.—WILMARTH & McKILLOP, of Pawtucket, have been awarded the contract to build a brick addition, 65 × 100 ft., to the factory of D. Goff & Sons, manufacturers of braid and plush, in River St.

ROCKVILLE, CONN.—The Minterburn Mills Co., been incorporated with a capital of $300,000, will begin work in a few weeks on a new mill at Rockville. It will be built of concrete or brick, 290 × 58 ft., and four stories high. There will be separate buildings for the boiler and dye houses. The incorporators are Francis T. Maxwell, William Maxwell, David A. Sykes and Robert Maxwell, of Rockville, and Thomas W. Sykes, of North Adams.

STAMFORD, CONN.—It is reported that the Atlantic Insulated Wire & Cable Co., 120 Liberty St., New York, has secured a site and will erect a factory here at once.

SOUTHINGTON, CONN.—It is reported that the H. D. Smith Co. will erect a large addition to its factory plant for the manufacture of carpenters' tools.

HARTFORD, CONN.—It is reported that the H. A. Adams Tool Co. is being organized to take over the property of the Cox mill, which it will remodel and improve by installing new machinery. Harry A. Adams is Pres.

BATH, N. Y.—It is reported that the T. S. Napier Co., of Binghamton, will build a silk mill at Bath, to cost about $30,000.

ELMIRA, N. Y.—We are informed by T. C. Flinn, of the Kennedy Valve & Construction Co., 57 Beekman St., New York, that a plant will be built at Elmira, to consist of seven buildings on a plot of 20 acres. All will be of brick, steel and concrete construction and fireproof. The estimated cost is $325,000.

COHOCTON, N. Y.—It is reported that the Wyland Canning Co. will establish a branch canning factory at Cohocton. Plans are prepared, five building to be erected at a cost of $20,000.

TROY, N. Y.—Press reports state that the George P. Ide Co. will build a six-story, fireproof factory at River and Hoosick Sts. for the manufacture of collars. F. B. Twining is Mgr.

ELIZABETHPORT, N. J.—We are officially informed that the MILLER-COLLINS CO., contracting engineers, 29 Broadway, New York, have been awarded the general contract for the boiler house, coal bins, etc., to be erected at Elizabethport for the Central Railroad of New Jersey.

CAMDEN, N. J.—Ballinger & Perrot, Archs., 1200 Chestnut St., Philadelphia, have prepared plans for the erection of a 3-story factory building, 200 × 50 ft., to be erected here for B. F. Boyer & Co.

SCRANTON, PA.—A. Hartman, Arch., Commonwealth Bldg., is preparing plans for the erection of a 3-sty brick plant for the Pennsylvania Baking Co. Complete equipment of baking machinery will be installed.

A 3-story addition will be built and complete machinery installed by the Paul Clemens Silk Co.

MIDDLETOWN, PA.—It is reported that the Middletown car works will erect a steel factory building, 70 × 250 ft., and an office building. Estimated cost is $100,000.

SHENANDOAH, PA.—The Columbia Brewing Co. is having plans prepared for the erection of a 5-story, brick and steel, fireproof addition to their plant.

RANKIN, PA.—The Carnegie Steel Co., Carnegie Bldg., Pittsburg, has let the contract to the RITER-CONLEY MANUFACTURING CO., Allegheny, Pa., for the erection of two blast furnaces to cost $2,000,000. Each will be 100 ft. high and 23 ft. wide at the base and will have a capacity of 600 tons of iron daily.

CARLISLE, PA.—W. W. Jury, Arch., Shawokin, Pa., is preparing plans for a 4-story, brick and steel, fireproof brewery for the Carlisle Brewing Co. Complete equipment will be installed.

SCRANTON, PA.—The Groot Knitting Mills are preparing to erect two new buildings and install large additional equipment.

WRIGHTSVILLE, PA. — The Monarch Silk Co., of York, Pa., will erect a branch silk mill at Wrightsville as soon as plans are prepared.

PHILADELPHIA, PA.—An addition, 68 × 163 ft., is to be erected at the plant of the J. G. Brill Co., to be used as a spring factory. Estimated cost is $25,000.

ALTOONA, PA.—According to press reports the Pennsylvania R. R. Co. will erect two four-story shops here for the accommodation of its vise, lathe, pilot, cab and other departments. It is proposed to spend $750,000 for building and equipment. W. H. Brown, Philadelphia, is Ch. Engr.

PITTSBURG, PA.—The Standard Building Construction Co. will erect at Neville Island a plant for the manufacture of stone, to cost $115,000.

ERIE, PA.—Additions to consist of three buildings, 165 × 55 ft., 42 × 20 ft. and 50 × 50 ft., will be erected at the Odin Stove Manufacturing Co.'s plant on West 12th St. T. W. Shacklett is Pres.

WASHINGTON, D. C.—JOHN McGREGOR, 729 12th St. N. W., has been awarded the contract for a telephone exchange building for the Chesapeake & Potomac Telephone Co., at $75,000.

RICHMOND, VA.—The Columbia Shoe Co., which has just been chartered here with $100,000 capital, will establish a plant for the manufacture of boots, shoes, and leather goods. L. B. Baker, Yarmouth, Mass., is Pres.

NARROWS, VA.—A veneering plant, to cost $75,000, will be erected here by the Pittsburg & Southern Veneer Manufacturing Co., Pittsburg, Pa. Building will be 80 × 500 ft. R. H. Enoch is Mgr.

PARKERSBURG, W. VA.—It is reported that the Baltimore & Ohio R. R. Co. will install extensive improvements at its yards and shops here, to cost $200,000. D. D. Carothers, Baltimore, is Ch. Engr.

WHEELING, W. VA.—The Wheeling Abattoir Co. has been incorporated with $200,000 capital, and will establish a plant at once. Plans and specifications are being prepared for the erection of a three-story building, 60 × 300 ft. Estimated cost is $125,000. Chas. Rohrig, V. J. Korn, Anton Corn and Chris. Kalbitzer, of Wheeling, and Chas. Schad, of Benwood, W. Va., are incorporators.

CHARLOTTE, N. C.—The Charlotte Pipe & Foundry Co., it is reported, will rebuild its foundry, recently destroyed by fire, at a cost of about $40,000. W. F. Dowd is Pres.

FAYETTEVILLE, N. C.—It is reported that the E. A. Poe Brick Co., recently incorporated with a capital stock of $50,000, will establish a plant with a daily capacity of 60,000 brick.

CANTON, N. C.—Contract for the erection of the Champion Fiber Co.'s paper plant here has been let to FRANK B. GILBRETH, 34 West 26th St. The plant will cover an area of 15 acres and will cost about $1,000,000. Geo. F. Hardy is Engr.-in-Charge.

PACOLET, S. C.—C. H. CUTTING, 11 Foster St., Worcester, Mass., has been awarded the contract for tearing down old buildings and erecting a new four-story brick factory, 107 × 110 ft., for the Pacolet Cotton Mills.

CHARLESTON, S. C.—The GAFFNEY BRICK CO. has been awarded the contract for an addition 200 × 100 ft. for the Limestone Cotton Mill Co. Equipment including 12,000 spindles and 300 looms will be installed.

MACON, GA.—It is reported that the Central of Georgia Ry. will build a freight depot and extensive shops here, at a cost of nearly $1,000,000. J. R. Hune, Macon, is Ch. Engr. of Bridges and Buildings.

SHELBYVILLE, TENN.—It is reported that the Robinson-McGill Manufacturing Co., of Shelbyville, is preparing to erect a large building to be utilized in the manufacture of carriages, buggies and other vehicles.

CHATTANOOGA, TENN.—O. B. Cornell and E. Bixby, of Kalamazoo, Mich., are having plans prepared for the erection of a plant of five buildings for the manufacture of writing paper. Chas. B. Pride is Arch. and Engr.-in-Charge.

MEMPHIS, TENN.—Plans have been prepared by the Annesdale Lumber Co. for large saw mill to be established in Raleigh Ave. The mill will be two stories in height, with a fireproof boiler house and two dry kilns, and will be 80 × 140 ft. in area.

CHATTANOOGA, TENN.—It is reported that the Casey-Hedges Co. will build four new buildings, 90 × 336, 50 × 135, 80 × 225 and 60 × 200 ft., to increase the capacity of their plant for the manufacture of boilers, engines, steam specialties and plumbers' cast-iron goods. M. M. Hedges is Pres. and Gen. Mgr.

L. E. Hutchinson and others are planning to erect a wooden mill here.

SOUTH PITTSBURG, TENN.—It is reported that the Aycock Hosiery Mills will erect a factory, 40 × 200 ft., two stories, and install machinery valued at $50,000, for the manufacture of hosiery. President Davis, of the Davis Hosiery Mills, Rossville, Ga., is interested.

CINCINNATI, O.—Bert. L. Baldwin, Arch., 72 Perin Bldg., is preparing plans for an addition to the foundry of the Lunkenheimer Co. at Tremont and Beekman Sts. Building equipment will cost $200,000.

MARION, IND.—It is announced that the plant of the National Sweeper Works, recently destroyed by fire, will be rebuilt at once.

ATTICA, IND.—The National Car Coupler Co., of Converse, Ind., is planning to erect a factory here, at a cost of $30,000, and move its plant to this city.

CHARLOTTE, MICH.—Plans for the factory of the Standard Carriage Lamp Co., which will move from Chicago to this city, are prepared and bids for the construction of the plant will be received. C. W. Ledyard, of Chicago, is Pres.

BAY CITY, MICH.—The World's Star Knitting Co. will erect a three-story and high basement addition to its plant, together with a new power-house. The addition will be 165 ft. × 55 ft., and power-house 52 × 82 ft.

FREEBURG, ILL.—The Freeburg Milling Co. will build a new flour mill during the coming summer. Charles Heiligenstein is Pres.

MILWAUKEE, WIS.—A four-story piano factory, 60 × 202 ft., together with a power-house and warehouse, will be erected at a cost of $75,000 by the Charles F. Netzoe Manufacturing Co.

MILWAUKEE, WIS.—O. C. Wehling, Arch., 831 Wells Bldg., is preparing plans for a brick and concrete machine shop, 100 × 200 ft., to be erected by the Smith Machine Co., at a cost of $25,000.

MINNEAPOLIS, MINN.—The Central Supply Co. is having plans prepared for a 6-story concrete fireproof warehouse, to be built at 212-16 Sixth St., at a cost of $75,000.

FORT WORTH, TEX.—The Fort Worth Cotton Gin Machinery Co. will erect a plant at once for the manufacture of "Simmons" cotton elevator and air distributor. First building to be erected will be 36 × 80 ft.

HOUSTON, TEX.—It is reported that the Houston Land & Irrigation Co., Opera House Bldg., will erect a rice mill.

GUTHRIE, OKLA.—F. E. Houghton, Pres. of the Houghton-Douglas Cotton Co., states that work will begin on the new cotton mill within thirty days. E. Cook, of Guthrie, is now making a tour of inspection among cotton mills to get ideas regarding its erection. The estimated cost is $50,000.

ARGO, COLO.—The Denver City Tramway Co. plans the erection of new shops near Argo, to cost $200,000. John A. Beeler, Denver, is Gen. Mgr.

WALLA WALLA, WASH.—It is reported that the capacity of the Gilbert Hunt Co.'s machine shop will be doubled. An expenditure of $50,000 is planned.

SEATTLE, WASH.—The New York Commercial reports that the Seattle Car Co. is planning to build a new car factory near this city to utilize Puget Sound lumber in the manufacture of cars. William Pigott is Pres.

TACOMA, WASH.—It is said that a steel plant t ocost $5,000,000 will be built here by Alfred H. Merritt, of Duluth, Minn., founder of the Duluth Iron Works, and J. W. Smith, of Los Angeles. Henry Hewitt, of Tacoma, is also interested.

CHEHALIS, WASH.—The St. Helens Condensing Co. will build an ice and cold storage plant here at once. The plant will be operated jointly by the St. Helens Co. and the Olympia Brewing Co.

PORT STANLEY, ONT.—We are officially advised that the J. Campbell Milling Co., of St. Thomas, and the Pere Marquette R. R. Co. contemplate the construction of a grain elevator at Port Stanley for unloading western wheat which is brought by water for use of this district. G. F. Bristol is Engr. Bldgs., Pere Marquette R. R. Co., Detroit, Mich.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

PIG LEAD.—Youngstown, O.—Bids are asked until noon, May 3, for 15 tons of pig lead. G. T. Prosser, Clk. Board Public Service. (Advertised, Engineering News.)

DREDGING.—Wilmington, Del.—Specifications are on file at office of Engineering News, New York, for dredging Mispillion River. Bids are asked until April 30, as advertised in Engineering News.

STONE BREAKWATER.—Buffalo, N. Y.—Bids are asked until 11 a. m., May 21, for construction of stone breakwater at South Harbor entrance. Col. H. M. Adams, Engr. (Advertised, Engineering News.)

TUNNEL.—Boston, Mass.—Plans and specifications for Section Nine of the Washington St. tunnel are on file at office of Engineering News, New York. Bids are asked until May 8, as advertised in Engineering News.

DREDGING.—New York, N. Y.—Bids are asked until noon, May 23, by Col. W. R. Livermore, Engrs., Army Bldg., for dredging in Bronx River and East Chester Creek, N. Y. (Advertised, Engineering News.)

CANAL WORK.—Yuma, Ariz.—J. N. QUICK, of Yuma, Ariz., has received award of contract for the construction of the Yuma Valley irrigation project. The contract calls for the excavation of 6,700 cu. yds. of earth.

DREDGING.—Detroit, Mich.—Specifications are on file at office of Engineering News, New York, for dredging Round Island Shoals, St. Mary's River, Mich. Bids are asked until May 14, as advertised in Engineering News.

BREAKWATER.—Port Stanley, Ont.—We are officially advised by the American Consul at St. Thomas, Ont., Maxwell K. Moorhead, that the Dominion Government proposes to build a 1,000-ft. breakwater in front of the harbor at Port Stanley and also to dredge the harbor to depth of 23 ft.

EXCAVATING FOR LAKE.—Central Valley, N. Y.—Bids are wanted at once by Richard Ficken, of Central Valley, for excavating for a 3-acre lake. Bidders must furnish own plans and specifications. (Advertised, Engineering News.)

CANAL.—Billings, Mont.—Contract drawings, specifications and bidding sheets for the construction of Division 1, Garland Canal, are on file at office of Engineering News, New York. Bids are asked until May 24, as advertised in Engineering News.

LIGHTING CABLES.—Philadelphia, Pa.—The Bureau of Yards and Docks, Navy Dept., has awarded to JOHN A. ROEBLING SONS, 612 South Broad St., Trenton, N. J., contract for furnishing lighting cables at League Island Navy Yard, at their figure of $8,186.

DREDGING.—Boston, Mass.—Bids were received on April 16, we are officially informed, for dredging in Merrimac River, Mass. John H. Latteney (agent), 50 Congress St., submitted low bid, at $41,650. (Advertised, Engineering News, on March 22.)

SLUICE GATES.—Yuma, Ariz.—J. G. WHITE & CO., 49 Exchange Pl., New York, has received award of contract for the construction of sluice gates and regulator gates for the Arizona side of the Laguna dam, Yuma Project, at a cost of $65,900. Their bond of $15,000 has been approved by the Secretary of the Interior.

CEMENT.—Glendive, Mont.—The Secretary of the Interior has awarded to the ILLINOIS STEEL CO., of Chicago, contract for furnishing 8,000 to 12,500 bbls. of Portland cement to be used in the Lower Yellowstone Project, N. Dak. and Mont. The bid of this company, which was the only one received, was $1.60 per bbl., f. o. b. cars at South Chicago, Ill.

MAIN SUPPLY CANAL.—Belle Fourche, S. Dak.—Bids are asked until 4 p. m., May 29, for the completion of the main supply canal, Belle Fourche Project, from Station 89 to terminus, involving the excavation of approximately 200,000 cu. yds., more or less, of material. R. F. Walter, Engr.-in-Charge, Reclamation Service, Dept. of Interior, Belle Fourche. (Advertised, Engineering News.)

BARGE CANAL.—Albany, N. Y.—Complete sets of plans and specifications for proposed four barge canal contracts are on file at office of Engineering News, New York. Fully noted in Engineering News last week.

STORAGE WORKS.—Portland, Ore.—Bids are asked until 2 p. m., June 27, by Supervising Engineer, Reclamation Service, Dept. of Interior, for the following work: Storage works near Conconully, Wash., including about 258,000 cu. yds. of earth excavation, 29,000 cu. yds. rock excavation, 160 ft. of tunnel and 2,300 cu. yds. of concrete. E. A. Hitchcock, Secy., Dept. Interior. (Advertised, Engineering News.)

FILLING-IN PRIVILEGE.—New York, N. Y.—Bids are asked until noon, April 30, by the Department of Docks and Ferries, for the right to dump and fill in behind the bulkhead wall recently built or to be built on the Maiden Lane section and on part of the Fulton section, on the East River, Boro. Manhattan. J. A. Bensel, Comr. Terms and conditions covering the work are on file at office of Engineering News, New York.

CAISSON LOCK-GATES.—Boston, Mass.—Specifications are on file at the offices of Engineering News in New York, Washington and Chicago for two steel caisson lock-gates. Bids are asked until May 14, as advertised in Engineering News. Hiram A. Miller, Ch. Engr. of Charles River Basin Comn., 367 Boylston St., Boston, advises us "that plans will be mailed to contractors who are interested in the work, provided they will agree to return them after they are through with them."

DAM WORK.—Carlsbad, N. Mex.—As no bids were received in response to the advertisement for proposals for the construction of the Avalon dam, Carlsbad, N. Mex., the Secretary of the Interior has granted authority to the Reclamation Service to commence construction by force account. It is extremely urgent that this work be carried forward with the utmost dispatch, as unless water is provided for the irrigable lands in this district some time during the summer several thousand acres of valuable lands in orchards will be ruined.

FERRY BOAT REPAIRS.—New York, N. Y.—The bids received on April 17 by the Department of Docks and Ferries for repairs to the municipal ferry boats "Robert Garrett" and "Castleton" were as follows: John T. Walsh, Jr., 136 Charlton St., $180,500; James Reilly Repair & Supply Co., 78 Beach St., $175,000; James Shervan & Son, Houston St. and East River, $149,000; J. Edward Ogden Co., 147 Cedar St., $161,000; Alexander Miller Bros., 10 Morris St., Jersey City, $175,750; Columbia Engineering Works, Imlay St., Brooklyn, $183,000.

EXCAVATION.—Glendive, Mont.—Bids were opened April 12 at the office of the U. S. Reclamation Service, Glendive, Mont., involving the excavation of approximately 2,662,900 cu. yds. of earth and 1,200 cu. yds. of rock, being the construction of divisions three, four, five (26½ miles) of the main canal near Glendive, Mont. Bids were as follows: Division 2: D. H. Freeman & Co., St. Cloud, Minn., $251,516. Division 4: Henry C. Delaney, Williston, N. Dak., $88,-091; C. J. Murphy, Glendive, Mont., $88,178; D. H. Freeman & Co., St. Cloud, Minn., $99,207.

CANAL WORK.—Klamath Falls, Ore.—The Secretary of the Interior has ordered the construction of the Klamath, Ore., distribution system of canals by force account. This part of the construction involves rather delicate questions of right-of-way on private property, and it is thought that controversies which might be likely to arise between property owners and contractors would be avoided by the Government doing the work. A further advantage in undertaking the work by force account is the great saving of time. At least 90 days would be required to advertise for bids, while under the proposed scheme work can be commenced immediately. It is expected, in view of the scarcity of labor in that section, that the Government will give employment to several hundred Klamath Indians who reside on the Klamath Indian Reservation not far from the project.

SPILLWAY.—San Francisco, Cal.—We are officially advised that EDWARD MALLEY, of San Francisco, has been awarded contract for spillway, etc., noted in issue of April 12, at $42,380. The itemized bid was as follows: 12,000 cu. yds. earth excavation at 80 cts.; 3,000 cu. yds. rock, at $1; 2,900 cu. yds. concrete (except cement), $5; 5,000 tons riprap at $2.50. H. W. Wadsworth, Flood Bldg., Engr. Capt. Wm. H. Harts, U. S. Engrs.

MAIN CANAL.—Glendive, Mont.—The Secretary of the Interior, on April 24, awarded contract to D. H. FREEMAN & CO., of St. Cloud, Minn., for work of Division 2 of main canal, Lower Yellowstone project, North Dakota and Montana. This work calls for about 110,000 cu. yds. of earth, 150,000 cu. yds. of overhaul and 800 lin. ft. of 24-in. terra cotta pipe. The bid of Freeman & Co., which was the ony one submitted, was $251,-516.

For Division No. 4 of the main canal, the Secretary has awarded the contract to HENRY C. DELANEY, of Williston, N. Dak., whose bid at $88,091 was the lowest received. The contracts calls for the excavation of approximately 465,000 cu. yds. of earth and 85,000 cu. yds. of over haul.

WHARF.—San Francisco, Cal.—Bids were received on April 12 by the Harbor Commissioners for constructing a new wharf at foot of Lombard St. as follows: Thompson Bridge Co., $137,500; Hyde, Hodges & Co., $139,000; HEALY-TIBBITTS Co., $129,800 (awarded contract); Pacific Construction Co., $131,000; Atlantic, Gulf & Pacific Co., $133,-000; Cotton Bros., $138,000.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

STEAM SHOVELS.—Panama.—Bids were opened April 12, at the office of D. W. Ross, Gen. Pur. Officer, Isthmian Canal Commission, for three steam shovels (Circular 304-a). Bids were as follows: Vulcan Iron Works, Toledo, O., $8,333.33 each, f. o. b. New York, one to be furnished April 20, others May 20; Atlantic Equipment Co., 111 Broadway, New York, f. o. b. New York, 8,750 each; f. o. b. Colon, $9,250 each; time, 225 days; Bucyrus Co., South Milwaukee, Wis., f. o. b. New York, $7,200; Colon, $7,450; time, during June; Marion Steam Shovel Co., Marion, O., on their own specifications (model 20), f. o. b. Marion, railroad trucks, $5,600; traction wheels, $6,200; both, $6,800; transportation to New York, $300 in each case; time, during July.

WHARF.—Guantanamo, Cuba.—The contract for constructing a wharf at U. S. Naval Coal Depot at Hospital Cay (bids opened April 9 by the Bureau of Equipment, Navy Dept., Washington, D. C.), has been awarded to SNARE & TRIEST CO., 143 Liberty St., New York, N. Y., for $145,980.

SUPPLIES.—Panama.—Bids were opened April 20 by the Isthmian Canal Commission, on Circular No. 304, calling for locomotive cranes, boilers, pumps, fudniture, etc. The bids of interest to engineers are: For four locomotive coaling cranes, 10-ton capacity, Brown Hoisting Machinery Co., Cleveland, $34,104; Browning Engineering Co., Cleveland, $25,200 and $28,900; Dodge Coal Storage Co., Philadelphia, $37,400; Industrial Works, Bay City, Mich., $26,200; Wellman-Seaver-Morgan Co., Cleveland, $36,400 and $34,800. For four locomotive coaling cranes, 20-tons capacity, Brown Hoisting Machine Co., $46,800; Browning Engineering Co., $33,200; Industrial Works, Bay City, Mich., $35,088. For four horizontal return tubular boilers, for air compressor plant, Edmond Burborn, New York, $10,488; Fox Bros. & Co., New York, $11,628; E. Keeler Co., Williamsport, Pa., $11,640; Manning, Maxwell & Moore, New York, $12,165; Motley, Green & Co., New York, $11,010; John H. Murphy, New Orleans, $13,055; Oil City Boiler Works, New York, $16,554; Penn Boiler Works, Erie, Pa., $12,000; Phoenix Iron Works, New York, $8,346; Walsh & Weidner Boiler Co., Coattanooga, Tenn., $12,500.

DREDGES.—Panama.—The following bids were opened April 23, at the office of David W. Ross, Gen. Pur. Officer, Isthmian Canal Commission, Washington, for two deep seagoing suction dredges for the Canal Zone. (a) is for use at Cristobal (Atlantic port), (b) at La Boca (Pacific port). Union Iron Works, San Francisco, Cal., (b) $500,000; to be delivered in 540 days at San Francisco; New York Shipbuilding Co., Camden, N. J., (a) and (b), each, $410,000; both, $780,000; 420 days; delivery, Camden, N. J.; bid includes services of engineer; Holland-American Dredge Building Syndicate, Schiedam, Holland, both (a) and (b), $852,000; delivery at Schiedam; $80,000 additional for delivery at Canal Zone; time, 365 and 425 days; Newport News Shipbuilding and Dry Dock Co., Newport News, Va., (a) and (b), each $460,-000; delivery, Newport News (b) 310 days; William Simons & Co., Renfrew, Scotland, (a) $327,000, 395 days; (b), $327,000, 335 days; delivery at Cristobal Zone, additional, (a) $17,980; delivery at Maryland Steel Co., Sparrows Pt., Md., (a) and (b) $396,900 each; time, 395 days each; delivery at Sparrow Point, (a) (b), both, $724,850; time, 365 and 425 days respectively; Motley, Green & Co., New York, dredges built by Ferguson Brothers, Port Glasgow, Scotland, (a), $425,000, 425 days; (b), 400 days; delivery at Cristobal; Fore River Shipbuilding Co., Boston, Mass., (a) and (b), each, $450,000; time, 395 days; delivery at Quincy; Moran Bros., Seattle, Wash., (b), $435,000; 365 days; delivery, Seattle.

READERS' WANTS FOR THOSE IN THE MARKET

The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, **mention Engineering News.** Have you a copy of our Buyers' Guide? **Engineering News Can Help Buyers.**

METAL TRUCK WHEELS.—Philadelphia, N. Y.—A. F. Nims, C. E., writes us that he desires to purchase some heavy metal truck-wheels.

SOAP MAKING MACHINERY.—Evangeline, La.—T. E. Glaze, Evangeline, La., writes us that he will soon be in the market for soap making and paper machinery.

SAND BLAST MACHINES.—Cleveland, O.—We are officially informed that W. J. Rattle & Son, 17 Mercantile Bank Bldg., Cleveland, O., are in the market for sand blast machinery.

PNEUMATIC TUBES OR CARRIER SYSTEM.—Havana, Cuba.—J. W. Schafer, Havana, Cuba, writes us that he is in the market for a pneumatic tube or carrier system for a wholesale drug house. The system should be able to carry packages varying in weight from a few ounces to 50 lbs.

TEMPERATURE INDICATORS.—Hattiesburg, Miss.—We are in receipt of a letter from The Warren Company, Contracting Engineers, 60 Wall St., New York, in which it states that it is in the market for an indicating device which, when placed about 15 ft. from the thermometer, will indicate the temperature of a steam-jacketed chamber heated up to the necessary temperature for operation.

GASOLINE-ELECTRIC CARS.—Dixon, Ill.—The A. M. Shaw Construction Co., of Dixon, Ill., informs us that it is in the market for interurban cars using gasoline and gasoline-electric motive power.

FLOUR MILL, LAUNDRY, BRICK MACHINERY, ETC.—Woolston, New Zealand.—The E. McAlpine Co., Ltd., Woolston, New Zealand, writes us that it is in the market for saw and flour mill machinery, also laundry, brick and tinsmithing supplies.

WATER-POWER PLANTS AND ELECTRIC PUMPING PLANTS.—St. Louis, Mo.—We are officially informed that the Rio Grande Land, Water & Power Co., Hauser Bldg., St. Louis, Mo., is about to begin the construction of extensive irrigating canals, power plants, etc., in the Rio Grande Valley of New Mexico, and will be in the market for water-power and electric pumping plants.

GENERAL MACHINERY AND ELECTRIC LIGHT PLANTS.—Tampa, Fla.—H. L. Davidson, Mgr. Davidson Manufacturing Co., Tampa, Fla., writes us that he has gone into the jobbing business. He will handle a line of general machinery and will pay particular attention to electric light plants of small units for residences and hotels. Mr. Davidson desires to correspond with firms interested in the above lines.

FOREIGN CONTRACTS.

(To insure prompt attention, consular business should be addressed to the American Consul at ——. Such letters are opened and handled by the person who happens to be in charge of the office. If addressed to the consul by name they are forwarded to the absent consul if he should be absent, and are opened if he should in the meantime have intervenes; if he should in the meantime have gone out of office they may well escape attention.)

IRON WORKS.—Akita, Japan.—It is reported that the Japanese Government proposes to construct iron works in Akita for the manufacture of railway material.

ELECTRIC RAILWAY.—Worms, Germany.—The Commercial Council of Worms is asking bids for the construction of an electric railway. The estimated cost is $[illegible].

ELECTRIC RAILWAY.—Madrid, Spain.—The "Gaceta" of April 5 contains a notice granting a concession to the Nueva Montana Sociedad Anonima del Hierro y Carbon de Santander for the construction and working of an electric tramway between Santander and Astillero.

DOCKYARD.—Kobe, Japan.—The Kawasaki Dockyard Co., Ltd., of Kobe, has orders for 31 various vessels. It will extend its works, raising its capital from $2,000,000 to $5,000,000, and borrow $5,000,000 abroad for the purpose of constructing a dry dock and other improvements.

LOCOMOTIVES, ETC.—Madero, Argentine Republic.—It is reported that the government will call for bids shortly for the supply of ten locomotives, 400 wagons and a crane capable of lifting 25 tons. The object of such purchase is to increase shipping facilities in the Madero port.

DRAINAGE SYSTEMS.—Santiago, Chili.—The government has signed a contract with the German Transatlantic Bank, representing the Deutsch Bank of Berlin, and Speyer Bros., of New York, for a loan of $18,500,000, to be used for the construction of drainage systems in various town in Chili.

BRIDGES.—Japan.—The contract for about 200 steel bridges, to be used in the construction of the Seoul-Wiji Railroad, has been awarded to the UNITED STATES STEEL PRODUCTS EXPORT CO. Complete contract calls for 50,000 tons of structural steel and was let by the Tokyo firm of Mitsui & Co.

ELECTRIFICATION OF RAILWAYS.—Italy.—A combination has been effected between the Societe Anonyme Westinghouse, the Westinghouse business in continental Europe, and the Officine Elettro-Ferroviarie, a company in Milan, Italy, of which Dr. George Finzi, the pioneer in Italy in the use of single-phase motors in traction, is the active head. Under this alliance electric installations will be made by the two organizations together on all Italian railroads. The installation of single-phase electric railways will bear the name of Westinghouse-Finzi.

(Continued on next page.)

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

GRANITE TOP MACADAM PAVEMENT.—Glencoe, Ill.—Bids were received by Frank A. Windes, Engr., on March 20, for granite top macadam paving, on proposals 153 and 154. In detail, the bids were: (1) Edward M. Laing, Highland Park, Ill.; (2) Kelly Construction Co., Lake Forest, Ill.; (3) Smith-Brown, Chicago; (4) M. H. McGovern, Chicago; (5) Union Paving Co., Chicago; (6) James Cape & Sons, Racine, Wis.:

BIDS RECEIVED FOR GRANITE TOP MACADAM PAVEMENT ON NO. 153.

	(1)	(2)	(3)	(4)	(5)	(6)
6,368 sq. yds. pavement	$0.92	$0.92	$0.93	$0.90	$1.00	$1.00
4,500 cu. yds. excavation	.30	.30	.25	.25	.25	.30
3,000 sq. yds. sod	.15	.30	.22	.25	.30	.30
90 sq. yds. brick crosswalks	1.50	1.65	1.50	1.80	2.50	2.00
18 concrete end curbs	5.00	5.00	4.50	4.50	6.00	5.00
1,690 ft. of 4-in. drain	.25	.24½	.35	.39	.25	.20
3,740 ft. of 6-in. drain	.30	.33	.40	.42	.30	.30
125 ft. of 8-in. drain	.50	.44	.40	.48	.50	.40
16 catch basins	30.00	30.00	30.00	30.00	30.00	30.00
2 cu. yds. concrete	6.00	7.00	6.00	5.50	8.00	7.00
Total bid	$9,982.56	$10,544.31	$10,552.74	$10,630.10	$10,829.00	$10,8[illegible]

BIDS RECEIVED FOR GRANITE TOP MACADAM PAVEMENT ON NO. 154.

	(3)	(1)	(4)	(6)	(5)	(2)
5,400 sq. yds. pavement	$0.93	$0.92	$0.90	$1.00	$1.00	$1.02
3,200 cu. yds. excavation	.25	.30	.25	.30	.25	.30
2,000 sq. yds. sod	.22	.15	.25	.30	.30	.20
19 catch basins	3.00	30.00	30.00	30.00	30.00	30.00
80 sq. yds. brick crosswalks	1.50	1.50	1.80	2.00	2.50	1.65
16 concrete end curbs	4.50	5.00	4.50	5.00	6.00	5.00
50 cu. yds. concrete	6.00	6.00	5.50	7.00	6.00	6.00
280 ft. of 12-in. drain	.80	.80	.69	1.00	.70	.80
600 ft. of 10-in. drain	.60	.50	.54	.60	.55	.50
2,960 ft. of 6-in. drain	.40	.40	.42	.30	.40	.30
280 ft. of 8-in. drain	.40	.50	.48	.50	.50	.40
2,280 ft. of 4-in. drain	.35	.30	.39	.20	.30	.20
66 ft. of 18-in. drain	1.10	1.00	.90	2.00	1.00	.75
Total bid	$9,693.60	$9,986.00	$10,214.40	$10,556.00	$10,746.00	$10,91[illegible]

PAVING.—Manistee, Mich.—We are officially advised ... the bids, in detail, received on March ... were as follows, for paving River, Sm... Maple and Washington Sts., by Geo. P. ... City Surveyor; (A) Charles Gerlach & ... Manistee; (B) C. E. Williams, Grand Ra... Mich.; (C) E. W. Seamans, Grand Ra... (D) Albert H. Prang, Grand Rapids; (E) NELSON & HANSON, Manistee (awarded contract for combined curb and gutter at ... cts. per lin. ft.—2-year guarantee); (F) The R. D. Baker Co., Detroit; (G) The Barber Asphalt Paving Co., Detroit; (H) The CENTRAL BITULITHIC PAVING ... Detroit (awarded contract for paving with bitulithic on concrete base, at $2.03 a sq. yd., and with Metropolitan block with Pioneer asphalt filler in street railway tracks, at $2.24 a sq. yd.—5-year guarantee): (1) Street railway track paving; (2) street paving. Total bids (3) for concrete foundation; (4) for stone foundation.

ASPHALT PAVING.—Seattle, Wash.—Two bids were received on March 10 by the Board of Public Works for paving North Tenth Ave. and other streets with asphalt on concrete foundation. Thickness of foundation, 4 and 6 ins.; thickness of wearing coat, 2 ins. Concrete curbs, with granite. The bids in detail which were received were as follows: (a) Independent Asphalt Paving Co., 602 Bailey Bldg., Seattle; (b) Barber Asphalt Paving Co., 612 Mutual Life Bldg., Seattle: 13,000 cu. yds. earth excavation, (a) 5 cts., (b) 20 cts.; clear and grub, lump sum, (a) $50, (b) $875; 4,860 sq. yds. brick gutters, (a) $2, (b) $2.15; 37,606 sq. yds. asphalt paving, (a) $1.60, (b) $1.50; 194 lin. ft. wood stops, (a) 30 cts.; (b) 25 cts.; 5,000 sq. yds. gravel foundation, (a) 10 cts., (b) 15 5-10 cts.; 1,684 lin. ft. cu. yd. gran. curb, (a) $1.60, (b) $1.35; 38 lin. ft. granite curb reset, (a) 50 cts.; (b) 60 cts.; 200 sq. ft. cement walks, (a) $1, (b) $1; 1 M. ft. B. M. lumber, (a) $14, (b) $18; 1,200 lin. ft. 8-in. c.-i. pipe "A," (a) $1.30, (b) $1.30; fixed estimate, $3,500; 15 catch basins, single inlets, (a) $50, (b) $50; 1 catch basin, double inlets, (a) $60, (b) $65; 27,410 lin. ft. concrete curbing, (a) 27 cts.; (b) 25 cts.; 934 sq. yds. sand stone block pavement, (a) $2.80, (b) $3.05; 5 brick gate chambers, each, (a) $30, (b) $30; 50 lin. ft. 6-in. c.-i. pipe, (a) $1, (b) $1.20; 6 hydrants, each, (a) $70, (b) $70; 5 8-in. valves, each, (a) $25, (b) $25; 4,000 lin. ft. tile drain, (a) 7 cts.; (b) 8 cts.; 124 sq. yds. concrete alley crossings, (a) $1.20, (b) $1.25; 35 catch basins to be moved, (a) $10, (b) $15; 48 catch basins and manholes to be adjusted, (a) $5, (b) $2.50; 25 monument cases, (a) $6, (b) $6; 85 inlets to be moved, (a) $2, (b) $1.50; total, (a) $92,044.90, (b) $91,399.40.

BIDS RECEIVED AT MANISTEE, MICH., MARCH 1, 1906, FOR PAVING FOUR STREETS.

BRICK—(5-year guarantee.)

	C		D		E		F		G	H	C	D	E	F	G	H	
Metropolitan Block:	(1)	(2)	(1)	(2	(1)	(2)	(1)	(2)	(1)	(1)	(3)	(3)	(3)	(3)	(3)	(3)	(4)
No. 6 Pitch Filler	$2.57	$1.97	$2.06	$1.86	....	......	$2.12	$1.75	$2.30	$2.24	$39,058	$35,451	....	$35,249	$36,793	$39,821	$38,792
Portland Cement Filler	2.51	1.91	2.00	1.80	....	......	2.08	1.71	2.15	2.24	38,047	34,440	....	34,575	36,470	39,821	38,792
Pioneer Asphalt Filler.	2.64	2.04	2.13	1.93	......	......	2.23	1.86	......	2.24	40,237	36,630	....	37,102	....	39,821	38,792
Medal Block:																	
No. 6 Pitch Filler	......	......	......	......	......	......	......	......	......	2.25	... ...	....	....	....	....	39,842	38 813
Portland Cement Filler	......	......	......	......	......	......	......	......	......	2.25	....	....	....	....	....	39,842	38,813
Pioneer Asphalt Filler.	......	......	......	......	......	......	......	......	......	2.25	....	....	....	....	....	39,842	38,813
Logan Block:																	
No. 6 Pitch Filler	2.57	1.97	......	......	......	......	2.10	1.73	......	2.32	39.058	....	....	34.912	....	39,993	38 964
Portland Cement Filler	2.51	1.91	......	......	$2.06	$1.84	2.06	1.69	......	2.32	38.047	....	$35 906	34,238	....	39,993	38,964
Pioneer Asphalt Filler.	2.64	2.04	......	......	......	......	2.21	1 84	......	2.32	40,237	....	....	36,765	....	39,993	39,964

BRICK—(10 year guarantee.)

	D		E		F		G	D	E	F	G	H	*
Metropolitan:	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(3)	(3)	(3)	(3)	(3)	(4)
No. 6 Pitch Filler	$2.11	$1.91	......	......	$2.17	$1.80	$2.40	$36,293	....	$36,237	$38,630	$42,233	$41,204
Portland Cement Filler	2.05	1.85	......	......	2.13	1.76	2.25	35,282	....	35,563	38,307	42,233	41,204
Pioneer Asphault Piller	2.18	1.98	......	......	2.28	1.91	......	37,473	....	38,091	....	42,233	41,204
Logan:													
No. 6 Pitch Filler	......	......	......	......	2.15	1.78	......	....	....	35,900	....	42 405	41,376
Portland Cement Filler	......	......	$2.08	$1.85	2.11	1.74	......	....	$36,151	35,226	....	42,405	41,376
Pioneer Asphalt Filler	......	......	......	......	2.26	1.89	......	....	....	37,754	....	42,405	41,376

*Will insure pavement for 2d period of 5 years for 3 cts per yard per year, to remain as an option, city may accept during first 5 years.

Combined curb and gutter and accessories:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Combined Curb and Gutter	$0.41	$0.40¼	$0.40	$0.35	$0.40½	$.041	$0.43	$0.42
Sand Filling under Curb and Gutter	.05	.02	.04	....	.04	.05	.05	.03
3-inch Drain Tile, under Curb and Gutter	.04	.06	.06	....	.05	.04	.06	.05
Steel band Curb protection	.10	.15	.07	....	.15	.15	.10	.10
Total	3,341	3,269 3,345	3,244	....	3,224 3,300 3,376	3,358 3,434	3,513 3,665	3,387
Guarantee, years	5	5 10	5	....	2 5 10	5 10	5 10	5

BITULITHIC—

(H) 5-year guarantee: With 6-in. crushed stone foundation, $2.03 per sq. yd.; total, $38,792. With 6-in. concrete foundation, $2.10 per sq. yd.; total, $39,821. 10-year guarantee: Add $2,412.50 on each 5-year total bid.

Bituminous macadam:

(G) (a) 5-year guarantee; (b) 10-year guarantee: With 6-in crushed stone foundation; (a) $1.85 per sq. yd.; total, $36,470; (b) $1.95; $38,307. With 6-in. concrete foundation: (a) $1.85; $36,470; (b) $1.95; $38,307:

GRADING AND HEADERS.

	(A)	(B)	(C)	(D)	(E)	(F)
Grading for Pavement, per cu. yd.	$0.25	$0.35	$0.35	$0.25	$0.24	$0.30
Oak Headers, 3 x 12 ins., per lin. ft.	.06	.30	.40	.15	......	.18

*CONCRETE SEWER.—Boston, Mass.—Bids were received on March 29 by the Boston Transit Commission for the construction of about 1,600 lin. ft. of brick and concrete sewers. B. Leighton Beal, Secy. The bidders and itemized bids were as follows; (a) Peter W. Hill, 426 Old South Bldg., Boston; (b) F. S. & A. D. Gore Corp., 511-512 Old South Bldg., Boston; (c) George W. Regan, Dorchester, Mass.; (d) Jas. J. Coughlan Cons. Co., 19 Worthington St., Boston; (e) Falvey & Kelly, Dorchester, Mass.; (f) John E. Palmer, 166 Devonshire St., Boston; (g) Patrick McGovern, 6 Beacon St., Boston; (h) Charles R. Gow Co., 79 Milk St., Boston; (i) Bruno, Salamone & Petitti, 23 Court St., Boston; (j) George W. Philips, Dorchester, Mass.; (k) Hugh Nawn Cont. Co., 82 Savin St., Roxbury; (l) Rowe & Perrini, South Framingham, Mass.; (m) COLEMAN BROS., 15 Court Sq., Boston (awarded contract):

FOREIGN CONTRACTS.

(Continued from page 154.)

SPINNING MILL.—Shanghai, China.—The Kanegafuchi Spinning Co. has decided to establish a mill at Shanghai, at the estimated cost of 3,000,000 yen ($1,500,000), which will be borne by the company's reserves. Recent negotiations for the purchase of the Tokyo Gassed Yarn Spinning Co. have been abandoned.

GARBAGE DISPOSAL.—Alexandria, Egypt.—The municipality of Alexandria intends constructing either one incinerator or destructor capable of burning 200 tons of garbage per day, or two incinerators capable of burning from 80 to 120 tons per day. Offers may be made directly to the municipality of Alexandria.

ELECTRIC RAILWAY.—Potsdam, Germany.—We are advised by P. t'Serstevens, Le Secretaire-General, Union Internationale de Tramways et de Chemins de Fer d'Interet Local, Brussels, that, at the present time, the municipality of Potsdam has decided to soon replace its network of horse-car lines with electric railway service.

RAILWAY.—Entre Rios, Argentine Republic.—Hugo Schroeder, concessionaire for the construction of a railway in Entre Rios from Uruguay to Villaguay, Villaguay to La Paz, and La Paz to Feliciano, has deposited securities to the amount of $10,000 in guarantee of the fulfilment of the concession. Entre Rios is a province of Argentine Republic, situated between Uruguay and Parana Rivers; area, 32,000 sq. miles; population, 300,000; capital, Bajada.

WATER-WORKS.—Penang, Straits Settlements.—The municipal commissioners of Penang have given favorable consideration to a supplemental report upon the proposal to bring in an additional supply of water from Batu Feringgi and Tanjong Bungah, compiled by L. M. Bell, the municipal engineer, who estimates that the total cost of the improvement will be $1,095,000 Straits currency. Adding to this sum the cost of work referred to in former reports, the aggregate cost will be $1,635,000.

ELECTRIFICATION OF STEAM RAILWAY.—Rangoon, India. The Rangoon Electric Tramways & Supply Co., Ltd., has been formed with a capital of £500,000 ($2,433,250), to acquire the tramway system of Rangoon, India, which is now operated by steam power, and to convert the same into an electric road within the confines of the municipality and cantonment of Rangoon. The company will also take over the contracts for the electric lighting of the city and will produce and sell electric power for manufacturing purposes. The office of the company is at 16 Dale St., Liverpool, England.

NEW INDUSTRIES.—Japan.—Several new industries are about to be established in Japan, according to the "American-Asiatic Journal of Commerce." One of these is the Toyo Paper Mill Co., of Osaka, which has chosen a factory site on the Kanzaki River, and will manufacture rice paper. The Ishigari Colliery Co., capital $7,500,000, has been formed to establish coal mines in Hokkaido Province, and build a railroad to and coal terminal at the coast, where a harbor will be established to accommodate vessels of 10,000 tons. They expect to handle 2,000,000 tons of coal annually. Steps have been taken to establish a large steel foundry near Kokura, and the Sumitomo steel foundry at Osoka is to be extended. All this industrial activity ought to mean some orders for improved American machinery.

RAILWAY CONSTRUCTION.—Lima, Peru.—We are informed that the Peruvian Government proposes to carry through the idea, formed some time ago, of joining its railway system with that of Bolivia. This would give direct communication between Buenos Aires and Lima. The project is an important and difficult one. The Central Northern, which the Argentine Government is now constructing towards Bolivia, to La Quiaca, will in all probability be finished by the end of 1906. The line will then be carried on to Tupiza, a distance of 115 kilometers (71½ miles). Bolivia has resolved to devote the £2,000,000 it received from Brazil, as indemnity for the Arce Territory, to railway building, and the construction of a line from Uyani to Potosi has already been authorized. This line will connect with the Chilian line from Antofagasta to Oruro. Other lines to the north are also to be built, and when the line from Tupiza to Potosi is built there will be through communication to the Peruvian frontier. The Peruvian lines which start from Mollendo have a length of 700 kilometers (435 miles), this still leaves 525 kilometers (326 miles) of line to be built between Huancayo and Sicuani. With these links constructed Lima will be in direct railway communication with Buenos Aires.

RAILWAY SUPPLIES.—Bangkok, Siam.—Bids are asked until Sept. 4, by the Siamese Government for the supply of 67 passenger cars, seven guards and luggage vans and 265 goods and ballast cars for the Royal State Railways, of which E. Kloke is Ch. Engr. at Bangkok. Consul-General Montgomery Schuyler, Jr., in a recent report to the government states: "It is to be noted that the sealed tenders will be opened in Bangkok on Sept. 4, 1906, and that therefore the time allowed is very short. It is sincerely to be hoped that American enterprise will try to obtain at least a portion of the present contract, as the principle of open tender is just becoming firmly established in Siam after repeated efforts, and largely through efforts of the Hon. Hamilton King, American minister here. It would produce an excellent impression in Siamese Government and financial circles to have America interest itself in this matter. On the three occasions in which there has been an open tender in Siam since the principle became established, only once has there been an American tender received, and that one arrived two days too late to be considered. There is no reason why American manufacturers cannot compete in the class of contracts with Siam, and closer commercial relationship will be of advantage to both countries."

CIVIL SERVICE EXAMINATIONS

ENGINEERS, ETC.—Albany, N. Y.—The State Civil Service Commission announces examinations to be held on May 12 for the following positions: Assistant Sanitary Engineer, State Department of Health, $5 a day, when employed; Bridge Draftsman, State Engineer's Office, $1,200 to $1,500; Consulting Sanitary Engineer, State Department of Health, $3,000. The last day for filing applications for this examination is May 7th. An examination will be held on May 26 for the following positions: Assistant Civil Engineer, $5 to $6 a day; Bridge Designer, $1,500 to $1,800; Civil Engineering Draftsman, $4 to $5 a day; Junior Bridge Draftsman, $900 to $1,200; Leveler, $4.50 to $5 a day. Charles S. Fowler, Ch. Examiner. (Advertised, Engineering News.)

BIDS RECEIVED ON MARCH 29 FOR CONCRETE SEWERS, BOSTON, MASS.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
380 lin. ft. open cut excavation for 4-ft. 6-in. sewer	$40.00	$22.50	$21.50	$20.00	$20.00	$25.00	$20.00	$20.00	$13.50	$17.80	$15.00	$13.00	$16.00
620 lin. ft. open cut excavation between Sta. 3 + 80 and Sta. 10 + 00 for 3-ft. 6-in. sewer	20.00	18.50	17.00	17.00	15.00	16.00	16.00	15.00	11.75	17.80	10.50	13.00	11.00
515 lin. ft. open cut excavation between Sta's 10 + 00 and 15 + 15 for 3-ft. 6-in. sewer	15.00	21.50	19.00	16.00	25.00	23.00	17.00	20.00	18.00	17.80	18.75	20.00	13.00
515 lin. ft. tunnel excavation between Sta's 10 + 00 and 15 + 15 for 3-ft. 6-in. sewer	12.00	19.50	17.00	16.00	15.00	12.50	17.00	15.00	25.00	20.00	18.00	20.00	13.00
100 cu. yds. of excavation for relocation of structures	3.00	2.50	6.00	3.50	3.00	4.00	5.00	3.00	1.75	1.50	3.00	2.00	3.00
100 cu. yds. of excavation for sewer in trench below grade line	3.00	2.50	6.00	3.50	3.50	4.00	5.00	3.00	2.50	2.50	3.00	2.50	4.00
250 cu. yds. brick masonry in place in trenches	20.00	16.00	17.00	18.00	19.00	17.00	16.00	18.00	16.00	15.00	15.00	14.00	15.00
150 cu. yds. brick masonry in place in tunnel	22.00	18.00	25.00	19.00	20.00	19.00	20.00	20.00	21.00	17.00	20.00	18.00	18.00
300 cu. yds. concrete in place in trenches	12.00	11.00	11.75	12.00	11.00	11.00	12.00	10.00	9.50	8.00	8.00	8.50	10.00
70 cu. yds. concrete in place in tunnel	15.00	12.50	16.00	13.00	12.00	12.00	15.00	12.00	12.50	10.00	10.00	10.00	12.00
For all work southerly from Sta. 15 + 15	4,000	5,630	2,950	4,500	4,000	3,500	3,000	3,500	3,000	2,000	4,000	2,500	3,500
25,000 ft. B. M. lumber for sheeting and shoring left in place in open trench	30.00	30.00	30.00	25.00	30.00	25.00	32.00	35.00	20.00	30.00	25.00	25.00	25.00
25,000 ft. B. M. lumber for permanent use in open trench other than for sheeting and shoring	50.00	45.00	40.00	42.00	40.00	40.00	35.00	45.00	45.00	38.00	40.00	35.00	45.00
6,000 lin. ft. spruce piles furnished and in place	.50	.25	.30	.25	.40	.30	.25	.25	.30	.25	.30	.40	.20
For laying 400 lin. ft. 6 and 8-in. pipe for underdrain furnished by commission	.50	.30	.20	.15	.50	1.00	.20	.20	.50	.25	.30	.10	.50
For laying 400 lin. ft. 10 and 15-in. pipe for underdrain furnished by commission	2.00	.40	.50	.15	.75	1.25	.50	.40	.60	.50	.75	.20	1.00
100 pipe branches	1.00	.50	1.00	1.00	1.00	1.00	1.00	1.00	1.50	.20	.25	.25	1.50
100 cu. yds. gravel or sand for filling below grade	2.00	2.00	1.00	1.50	2.00	1.70	1.50	2.00	1.50	1.50	1.50	2.00	1.50
Totals (by open cut)	$60,665	$53,197	$49,522	$48,565	$52,945	$52,730	$46,420	$48,040	$40,790	$43,497	$40 946	$40,640	$38,845
Totals (if 515 ft. should be done by tunnel)	$59,630	$52,572	$49,990	$48,785	$48,015	$47,692	$47,230	$45,905	$45,355	$45,070	$41,450	$41,345	$39,435

Time of completion: (a) July 30, 1906; (b) in 70 days; (c) Oct. 1, 1906; (d) June 20, 1906; (e) July 1, 1906; (f) Aug. 10, 1906; (g) Oct. 1, 1906; (h) Sept. 1, 1906; (i) Aug. 1, 1906; (j) Aug. 1, 1906; (k) Oct. 1, 1906; (l) Sept. 1, 1906; (m) June 15, 1906.

BRIDGE AND CULVERT.—Quincy, Mass.—We are officially advised that there were 15 bids received by the Metropolitan Park Commission, Boston, Mass., on March 19, for building a bridge over Sachem Brook, and a culvert, Quincy Shore Reservation, Quincy. John R. Rablin, Engr. The bidders were as follows, with itemized bids submitted by each:

INDUSTRIAL NOTES.

HENRY P. MILLER announces that he will open an office under the name of Henry P. Miller & Co., Real Estate Trust Bldg., Philadelphia, Pa., for transacting a brokerage business in railroad contractors' equipment with iron and scrap steel.

MARINE ENGINE & MACHINE CO., New York, informs us that they have been awarded the contract for the eleven electric elevators to be installed in the new Brunswick Bldg., at 26th St., Broadway and Fifth Ave., New York. Owing to the increase of business, the company has moved to 230-232 West 13th St., where more spacious quarters have been obtained.

BIDS RECEIVED ON MARCH 19, 1906, FOR BRIDGE AND CULVERT AT QUINCY, MASS.

	600 Cu. Yds. Earth Grading.	116 Spruce Piles 20' Long	1 Reinforced Concrete Bridge 20' Span.	1 Reinforced Concrete Culvert 6'x 6'	50 Sq. Yds. Riprap.	Totals.
Ruggles & Fallon	$0.60	$6.00	$5,614	$1,089	{ included in item "d"	$7,760
Coleman Bros., Boston	1.00	6.60	5,705	1,213	$2.50	8,409
N. S. Brock, Brighton	.70	4.00	6,450	1,700	2.00	9,134
David J. Sheehan & Co., Lynn	1.50	4.50	5,850	2,800	1.25	10,134
Wm. Shea & Sons, W. Quincy	1.75	5.00	6,492	2,150	1.00	10,322
Geo. H. Cavanagh, Boston	.75	6.00	7,700	1,700	1.20	10,606
T. H. Gill & Co., Boston	1.00	3.00	5,775	3,900	1.50	10,698
Andrew D. Fuller Co., Boston	.72	6.00	7,542	2,718	1.00	11,438
John T. Scully Foundation and Transportation Co., Cambridge	.40	6.00	8,910	1,650	1.50	11,571
Fred S. and A. D. Gore Corporation, Boston	.50	6.20	7,915	2,766	2.50	11,825
Marr Bros., Wollaston	1.00	11.40	7,505	2,294	3.75	11,909
Falvey & Kelley, Dorchester	2.50	10.00	8,000	2,500	2.00	13,260
Healy Sewer Machine and Construction Co., Boston	1.00	3.45	9,000	3,000	10.00	13,500
J. J. Sullivan, Boston	5.00	4.40	7,982	2,174	3.00	13,766
John Cashman, Quincy	1.50	6.00	8,749	4,000	2.00	14,445

*DAM, CANAL, EMBANKMENTS, ETC.—Boise, Idaho.—The Reclamation Service, U. S. G. S., announces that the bids, with itemized prices, opened on Feb. 1, for the first contracts for dam, canal, earthen embankments, etc., in connection with the Payette-Boise project, were as follows: A. J. Wiley and E. G. Hopson, Consult. Engrs.; D. W. Ross, Supervising Engr.; the bidders were (A) The Bates & Rogers Construction Co., Chicago; (B) P. McDonnel, Duluth, Minn.; (C)† HUBBARD & CARLSON, Boise (awarded contract for Schedule No. 6); (D) CONWAY & WILHITE, Star, Idaho (awarded contract for Schedule No. 3); (E) Ferris & Kesl, Boise; (F) UTAH FIRE-PROOFING CO., Salt Lake City, Utah (awarded contract for Schedule No. 1); (E) PAGE & BRINTON, Salt Lake City, Utah (awarded contract for Schedule No. 4); (H) Clement & Strange, Salt Lake City:

SCHEDULE NO. 2.—Main South Side Canal from Boise River to Indian Creek.*

	(C)†
830,000 cu. yds. excavation, class 1	$0.17
56,500 cu. yds. excavation, class 2	0.40
56,500 cu. yds. excavation, class 3	0.50
32,000 cu. yds. excavation, class 4	0.70
10,000 cu. yds. excavation, class 5	1.40
3,500 cu. yds. riprap	1.25
Total	$232,725

A. V. KAISER & CO. inform us that they have rented a suite of offices in the Drexel Bldg., Philadelphia, Pa., and will occupy same about May 1.

THE L. SCHREIBER & SONS CO., Cincinnati, will install an Allis-Chalmers 150-KW. engine type generator, recently purchased. The machine will be built at the company's Bullock Works, in Cincinnati, and will be ready for operation early in July.

VIELE, COOPER & BLACKWELL announce that they have organized a corporation, with offices at 49 Wall St., New York, to examine and report upon proposed developments of power, to design, construct and operate hydraulic and electric power plants.

INGERSOLL-RAND CO. has appointed C. Frank Schwep, General Purchasing Agent of the Ingersoll-Rand Co., with headquarters at 11 Broadway, New York. Mr. Schwep has been at the head of the Purchasing Department of the Ingersoll-Sergeant Drill Co. for the past thirteen years.

THE YOUNGSTOWN SHEET & TUBE CO., of Sharpsville, Pa., is a recent purchaser of Allis-Chalmers electrical machinery, to be built at Cincinnati, Ohio, consisting of a 75-KW. engine type generator. The new outfit will be used for incandescent lighting and power purposes.

THE B. F. STURTEVANT CO. reports that the new foundry buildings and core shops of Stanley G. Flagg & Co., Pottstown, Pa., containing nearly 750,000 cu. ft. of space, are to be heated and ventilated throughout by apparatus installed by the B. F. Sturtevant Co., of Boston, Mass.

THE B. F. STURTEVANT CO. reports that Trinity Cathedral, Cleveland, Ohio; the Knickerbocker Hotel, New York City; and the Jefferson County Bank, Louisville, Ky., are to be completely equipped with Sturtevant heating and ventilating apparatus, consisting in each case of centrifugal fan and steam heater.

THE AMERICAN CREOSOTING CO., New York, informs us that its plant at Newark, N. J., is fully equipped to do all kinds of creosoting, such as bridge and dock timbers, railroad ties, wood block paving, etc. Two of the four cylinders being over 106 ft. long, enables them to creosote extra long piling and timbers.

THE BUFFALO FORGE CO. has closed contract with the Delaware & Hudson Co. for a large forced draft equipment, which will go to the Olyphant Colliery, near Scranton, Pa. The apparatus will eventually supply 14 boilers, and consists of a three-quarter housing steel plate fan with 15-in. blast wheel direct-connected to a plain slide valve heavy duty engine.

THE NATIONAL CARBON CO., Cleveland, Ohio, has for some time operated gas engines of different makes up to 200 HP. in its various factories. It is now installing in its works at Clarksburg, W. Va., a 600-brake HP. Koerting gas engine, supplied by the De La Vergne Machine Co., of New York. The engine will be used for general power purposes and will operate on natural gas.

THE WEED LUMBER CO., San Francisco, Cal., recently ordered through the San Francisco office of the Allis-Chalmers Co., electrical machinery for installation at Marysville, Cal. The new outfit consists of a 700-KW. belted alternator and a small type "B" belted exciter, together with a large number of type "AN" induction motors, ranging from 3 to 75 HP. each, with a total aggregate of 248 HP.

THE WESTERN CANADA CEMENT & COAL CO., LTD., has recently concluded the purchase, through the Allis-Chalmers-Bullock (Ltd.), of Montreal, of three Allis-Chalmers steam turbines and generators, 100-KW. capacity, which will be installed on the company's properties located 57 miles west of Calgary, Canada, on the Canadian Pacific Railway. The new units will generate current of 60 cycles, three-phase, at 600 volts.

THE UNITED STATES DRYING ENGINEERING CO., 66 Beaver St., New York, reports sales of its dryers: Three to the newly discovered phosphate fields of Japan; a complete white lead plant to the E. A. Kinsey Co., of Cincinnati, Ohio; a sand dryer to S. J. Warren, of Bainbridge, Ga.; two hunus dryers to the Alphano Co., of Great Meadows, N. J.; dryer for drying aluminum clays to the McAdamite Company, of Canada; a peat dryer to the California Fuel Co., and a sand dryer to the New York Granite Brick Co.

THE JOHN A. ROBELING'S SONS CO. informs us that its warehouses at 25-27 Fremont St. and 22-28 Beale St., San Francisco, have been destroyed. Through the courtesy of the Pacific Steel & Wire Co. the Roebling Company has been able to establish temporary quarters at Oakland. Large quantities of wire rope and wire, originally intended for San Francisco, have been shipped to Oakland, where customers will be supplied. The stocks in the warehouses at Los Angeles, Portland and Seattle will also be increased so as to enable them to supply the demand on the Pacific coast.

THE AMERICAN CAN CO., of Paulsboro, N. J., will install a 20-in. and 42-in. × 42-in. Allis-Chalmers horizontal cross compound engine, directed connected to a 500 KW. engine type electrolytic generator and switchboard, recently purchased from the Allis-Chalmers Co., Milwaukee. The engine will run condensing at 135 steam pressure and 100 r. p. m. It will be equipped with a special speed changing device for varying the speed so that the generator voltage may be governed over a range of 100 to 200 volts. The generator will be a 14-pole machine, 500 KW., 200 volts. The shunt field coils will be so proportioned as to allow for increases in voltage between 100 and 200 volts, by approximately equal increments by varying the speed of the engine and by rheostat, the output in amperes being constant at 2,500 throughout the range.

SCHEDULE NO. 1.—Dam and Diverting Works, Boise River.

	(A)	(B)	(E)	(F)
15,000 cu. yds. concrete masonry	$5.50	$4.75	$5.75	$5.00
5,000 cu. yds. concrete	6.50	6.50	7.00	6.00
10,000 lbs. steel for reinforcing	0.08	0.04	0.075	0.08
325,000 ft. B. M. lumber, common	35.00	30.00	30.00	30.00
20,000 lbs. drift bolts	0.07	0.04	0.075	0.07
2,500 cu. yds. fill in cribwork	0.75	0.50	0.75	1.00
10,000 cu. yds. excavation, wet, class 1	2.75	1.60	3.00	2.00
4,000 cu. yds. excavation, wet, class 2	2.75	1.60	1.50	2.00
9,000 cu. yds. excavation, dry, class 1	1.25	1.60	2.00	0.90
3,000 cu. yds. excavation, dry, class 2	1.25	1.60	1.00	0.80
1,000 cu. yds. riprap	2.00	1.50	2.50	1.00
Total	$185,950	$159,050	$194,625	$158,950

SCHEDULE NO. 3.—Main Canal from Indian Creek to Deer Flat Reservoir.

	(C)†	(D)	(G)
320,000 cu. yds. excavation, class 1	$0.15	$0.14	$0.17
60,000 cu. yds. excavation, class 2	0.35	0.35	0.33
16,000 cu. yds. excavation, class 3	0.48	0.50	0.60
3,800 cu. yds. excavation, class 4	0.70	0.75	0.70
15,000 cu. yds. excavation, class 5	1.40	1.25	1.00
Total	$100,340	$95,400	$101,460

SCHEDULE NO. 4.—Structures on Canal from Boise River to Deer Flat Reservoir.

	(E)	(G)
500 cu. yds. bridges, concrete	$10.00	$8.00
40,000 lbs. bridges, iron bolts and tie rods	0.10	0.08
125,000 ft. B. M. bridges, common lumber	35.00	60.00
2,800 cu. yds. turnouts, concrete	12.50	7.00
4,000 lbs. turnouts, steel	0.075	0.09
1,100 cu. yds. culverts and drops, concrete	12.50	8.00
6,500 lbs. culverts and drops, steel	0.075	0.07
600 cu. yds. diverting works from Indian Creek, concrete	12.50	8.00
2,000 lbs. diverting works from Indian Creek, steel	0.075	0.07
Total	$70,562.50	$48,855.00

SCHEDULE NO. 5.—Upper Deer Flat Embankment and Diverting Works.‡

	(B)	(C)†	(E)
1,000,000 cu. yds. embankment, earth and gravel fill	$0.36	$0.37	$0.375
20,000 cu. yds. excavation in foundation, class 1	0.18	0.15	0.20
5,000 cu. yds. excavation in foundation, class 2	0.50	0.30	0.40
5,000 cu. yds. excavation in foundation, class 3	0.50	0.35	0.50
2,500 cu. yds. diverting works, concrete	4.50	5.00	10.00
20,000 lbs. (diverting works) steel for reinforcing	0.04	0.04	0.075
10,000 lbs. (diverting works) steel in bridge and canopy	0.15	0.04	0.125
Total	$382,150	$389,950	$411,250

SCHEDULE NO. 6.—Lower Deer Flat Embankment and Diverting Works.

	(B)	(C)†	(E)	(G)	(H)
950,000 cu. yds. embankment, (a) earth and gravel body with gravel face and back	$0.38	.....	$0.45	$0.52	.....
850,000 cu. yds. embankment, (b) earth body with gravel face and back (body)	0.29	$0.24	0.31	0.23	0.32
100,000 cu. yds. embankment, face and back	0.39	0.35	0.40	1.00	0.42
40,000 cu. yds. excavation in foundation, class 1	0.18	0.15	0.20	0.17	0.26
5,000 cu. yds. excavation in foundation, class 2	0.50	0.30	0.35	0.25	0.38
5,000 cu. yds. excavation in foundation, class 3	0.50	0.35	0.50	.35	0.50
1,500 cu. yds. (diverting works) concrete	4.75	5.00	10.00	10.00	7.50
15,000 lbs. (diverting wks) steel for reinforcing	0.04	0.04	0.075	0.10	0.05
5,000 lbs. (diverting works) steel in bridge and canopy	0.15	0.04	1.25	0.10	0.08
Total	(a)$381,675	.....	$496,500	$520,800	.....
	(b)$306,175	$256,550	$332,500	$322,300	$341,200

†Condition: Will accept the award of one only of either schedules 2, 3, 5 or 6 at prices therein named.
*Readvertised.
‡Force account.

SEWERS.

Plainfield, N. J.

Sealed proposals will be received by the Common Council of the City of Plainfield, N. J., on May 7, 1906, at 8 P. M., for the construction of sanitary sewers, including 12,844 feet 8-inch sewer, 5 to 11 feet deep;
48 feet 8-inch cast iron sewer;
518 branches;
1,500 feet 4-inch connections to curb;
24 manholes;
13 flush tanks.

Certified check for $200 to accompany each bid, and the amount of bond required will be $3,000.

Duplicate plans may be examined, and forms of proposals, specifications, contract and bond may be obtained at the office of the Engineer, 151 North Avenue, Plainfield, N. J.

JAMES T. MacMURRAY,
City Clerk.
ANDREW J. GAVETT,
City Surveyor.
Dated April 11, 1906. 17-1t

READVERTISEMENT.

ROAD IMPROVEMENTS.

East Hampton, N. Y.

Sealed proposals for the improvement of approximately nineteen miles of roads will be received by the Commissioners of Highways of the Town of East Hampton, N. Y., at the East Hampton National Bank until two o'clock P. M., Wednesday, May 2, 1906, and then publicly opened and read. A certified check for $1,000, payable to Geo. A. Miller, Supervisor, must accompany each bid.

The commissioners reserve the right to reject any or all bids.

Plans, specifications, etc., may be seen at the office of the Town Clerk at East Hampton, or at the office of the Engineers.

JAMES E. GAY,
JOHN S. PENNY,
FRANK S. BARNES,
Commissioners.
SWINBURNE & CLARK,
Civil Engineers,
156 Fifth Ave., New York. 17-1t

SEWERS AND SEPTIC TANK.

Belleville, Ill.

Sealed proposals will be received by the Board of Local Improvements of the City of Belleville, Illinois, on Tuesday, May 8th, 1906, for the construction of an intercepting sewer and septic tank, as follows:
1,527 feet of 36 inch vitrified clay pipe sewer.
1,803 " " 30 " " " " "
3,885 " " 27 " " " " "
7,465 " " 24 " " " " "
4,350 " " 21 " " " " "
600 " " 18 " " " " "
60 " " 12 " cast iron pipe.
47 brick manholes, complete, with cast iron covers.
1 septic tank complete.

Plans, profiles and specifications can be seen at the office of the City Engineer.

FRED. J. KERN,
President.
L. L. HARPER,
City Engineer. 17-1t

EXCAVATING.

Central Valley, N. Y.

Bids are wanted by Richard Ficken, Central Valley, N. Y., for excavating for a 3-acre lake. Bidders must furnish own plans and specifications. 17-1t

U. S. ENGINEER OFFICE, Army Building, New York, April 23, 1906.—Sealed proposals for dredging in Bronx River and East Chester Creek, N. Y., will be received here until 12 m., May 23, 1906, and then publicly opened. Information furnished on application. W. R. LIVERMORE, Con. Engrs. 17-4t

U. S. ENGINEER OFFICE, Army Building, New York, April 7, 1906.—Sealed proposals for hire and operation of one or more dredging plants for dredging in Harlem River, N. Y., will be received here until 12 M., May 8, 1906, and then publicly opened. Information furnished on application. W. R. LIVERMORE, Col., Engrs. 15-4t

DEPARTMENT OF THE INTERIOR, Washington, D. C., April 21, 1906.—Sealed proposals will be received at the office of the Reclamation Service near Belle Fourche, South Dakota, until 4 p. m., May 29, 1906, for the completion of the Main Supply Canal, Belle Fourche Project, South Dakota, from Station 80 to terminus, involving the excavation of approximately 200,000 cubic yards, more or less, of material. Specifications, form of proposal and plans may be obtained from the Chief Engineer, United States Geological Survey, Washington, D. C., or from R. F. Walter, Engineer in Charge, Belle Fourche, South Dakota. E. A. HITCHCOCK, Secretary. 17-4t

U. S. ENGINEER OFFICE, Buffalo, N. Y., April 20, 1906.—Sealed proposals in triplicate for construction of stone breakwater at South Harbor entrance, Buffalo, N. Y., will be received here until 11 A. M., May 21, 1906, and then opened. Information furnished on application. H. M. ADAMS, Col. Engrs. 17-4t

NEW COURT HOUSE AND HALL OF RECORDS.

White Plains, Westchester County, New York

Sealed bids or estimates will be received by the Committee on New Court House of the Board of Supervisors of Westchester County, until 11 o'clock a. m., on May 14, 1906, for the erection of a new Supreme Court Building, and an addition to the present Hall of Records, on the Westchester County Court House grounds, at White Plains, New York. The said bids will be opened in the rooms of the Board of Supervisors on said 14th day of May, 1906. Bids must be in sealed envelopes, addressed to Chauncey T. Secor, Chairman, and marked on the outside, "Proposals for New Buildings." Each bid must be accompanied by a certified check for ten thousand ($10,000) dollars payable to Chauncey T. Secor, Chairman of the Board of Supervisors.

The successful bidder will be required to give a bond, and comply with other conditions in the contract, form of which, with plans and specifications, may be seen at the office of the Board of Supervisors, White Plains, N. Y., and at the office of the Architects, Messrs. Lord and Hewlett, 16 East Twenty-third street, New York City.

The bidder must deposit with the architect, not later than May 12, 1906, samples (in six-inch cubes) of the stone on which his bid is based. A portion of these samples will be subject to such tests as the architect shall deem necessary, and the remainder be retained as samples of the material to be furnished. Any stone which does not stand the test satisfactorily will be rejected, and no bid contemplating the use of rejected stone shall be considered. The quality of the stone furnished must conform to the samples presented by the bidder, and kept in the office of the architect.

No bid will be received or considered, unless deposit of samples referred to above are made within the time prescribed, nor unless they conform to the requirements of the specifications and are approved by the architects.

PLUMBING.

Sealed proposals will also be received at the same time and place for plumbing the above buildings. Proposals, contract, plans and specifications for which may be seen as above.

Proposals must be addressed to Chauncey T. Secor, Chairman, marked "Proposals for Plumbing," and accompanied with a certified check for five per cent. of the total amount of such bid.

HEATING AND VENTILATING.

Sealed proposals will also be received at the same time and place, for heating and ventilating the above buildings. Proposals, contract, plans and specifications for which may be seen as above.

Proposals must be addressed to Chauncey T. Secor, Chairman, and marked "Proposals for Heating and Ventilating," and accompanied with a certified check for five per cent. of the amount of such bid.

ELECTRIC WIRING.

Sealed proposals will also be received at the same time and place, for electric wiring, for above buildings. Proposals, contract, plans and specifications for which may be seen as above.

Proposals must be addressed to Chauncey T. Secor, Chairman, and marked "Proposals for Electric Wiring," and accompanied by a certified check for five per cent. of the total amount of such bid.

The committee reserves the right to reject any or all bids.

Dated White Plains, N. Y., April 16, 1906.

16-4t CHAUNCEY T. SECOR,
Chairman of Committee on New Court House.

WATER-WORKS INFILTRATION GALLERY.

Office City Clerk.
Columbus, Indiana.

Sealed proposals will be received at this office up to 8 P. M., May 21, 1906, for the construction of a wooden Infiltration Gallery 210 feet long in White River.

The Common Council reserves the right to reject any or all bids.

GEORGE VORWALD, City Clerk.
W. H. RIGHTS, Civil Engineer. 17-2t

DEPARTMENT OF THE INTERIOR, Washington, D. C., April 23, 1906.—Sealed proposals will be received at the office of the Supervising Engineer, United States Reclamation Service, Portland, Oregon, until 2 o'clock p. m., June 27, 1906, for the following work: Storage works near Conconully, Washington, including about 258,000 cubic yards of earth excavation, 29,000 cubic yards of rock excavation, 160 feet of tunnel, and 2,300 cubic yards of concrete. Particulars may be obtained at the offices of the U. S. Reclamation Service, at Washington, D. C., Portland, Oregon, and Pogue, Washington. E. A. HITCHCOCK, Secretary. 17-3t

STEEL BRIDGE CABLES FOR SALE.

Pawnee, Okla.

The Board of County Commissioners of Pawnee County, Oklahoma, offer for sale eight (8) reels of one and one-half inch (1½) galvanized bridge cables, 1,190 feet each, manufacture of A. Leschen & Sons Rope Co.

Bids will be received for the same until 6 o'clock P. M. on May 14th, 1906, and the Board of Commissioners will meet at the office of the County Clerk in Pawnee, Oklahoma, on May 15th, 1906, at 1 o'clock P. M., at which time the bids will be opened.

A part or all of the cable will be sold, but bids for less than one reel (1,190 feet) will not be considered. Bids should be made for the cable F. O. B. Cleveland, Okla. (M. K. & T. R. R.), at which place the cables can be examined.

The right is reserved to reject any or all bids that may be offered. All correspondence should be addressed to C. R. Adams, County Clerk, Pawnee, Oklahoma, and bids sent to same address.

C. R. ADAMS,
County Clerk of Pawnee Co.,
(SEAL) Oklahoma Territory.
Pawnee, Okla., April 11, 1906. 16-2t

GRADING, PAVING, CURBING, ETC.

Office of the Board of Public Improvement.
Suffolk, Va., April 11th, 1906.

Sealed proposals will be received until 7.30 P. M. of May 11th, 1906, for furnishing all materials and labor necessary for the grading, curbing and paving of certain streets in the town of Suffolk, approximating 40,000 square yards.

Propositions will be received in accordance with blank forms furnished by the Engineer, and the following materials will be considered:

Vitrified Paving Block on Concrete Foundation.
Asphalt Block on Concrete Foundation.
Bitulithic on Concrete Foundation.
Sheet Asphalt on Concrete Foundation.
Granite Block on Sand Foundation.

The work may be done with one class of paving exclusively or divided among the several classes at the discretion of the Council.

Bids must be submitted on the regular blank forms of the Corporation of Suffolk, sealed and addressed to Simon M. Lawrence, Clerk of the Council.

The Council of the Corporation of Suffolk reserves the right to reject any or all of the bids submitted.

Instruction to Bidders, Specifications and General Stipulations on application. State what kind of work you wish to submit proposition on.

COL. J. H. McCLEARY,
Chairman.
LEE SHAFFER,
Engineer. 16-2t

STEEL STAND PIPE.

Chatham, Va.

Bids are invited until May 18th, 1906, for the construction of a 94,000-gallon Steel Stand Pipe, on a masonry foundation, for the Town of Chatham, Va. Detailed plans and specifications may be seen at the office of the Mayor, or of the Designing Engineer. Persons residing at a distance may obtain copies of the plans and specifications from the Mayor, by enclosing a check in the sum of $3.00, payable to the Treasurer of Chatham, Va. If plans and specifications are returned promptly, and in good condition, this check will be refunded.

All bids must be accompanied by a certified check in the sum of $200.00, which will become a forfeit to the Town of Chatham, if the bidder fails to enter promptly into a contract, should the work be awarded him. These checks will be returned as soon as the work is let.

After the contract has been awarded the contractor will be required to file a bond of some Security Company satisfactory to the Council of the Town of Chatham, in an amount equal to 15% of his bid, as a guarantee for the satisfactory fulfillment of all the conditions set forth in the contract.

The Town of Chatham reserves the right to reject any or all bids.

For further information address,

J. H. HARGRAVE, JR.,
Mayor of Town of Chatham, Va.
J. N. AMBLER,
17-1t Designing Engineer, Salem, Va.

DEPARTMENT OF THE INTERIOR, Washington, D. C., March 28, 1906.—Sealed proposals will be received at the office of the United States Reclamation Service, Billings, Montana, until 2 o'clock p. m., Thursday, May 10, 1906, for the construction of the Lower Yellowstone dam, a rock-filled timber-cribbed structure, requiring about 500,000 ft. of lumber, 700 piles, 1,000 sheet piles, 11,000 cubic yards of rock filling and riprap, and 80 tons of steel, located about 18 miles northeast of Glendive, Montana. Particulars may be obtained from the Chief Engineer of the Reclamation Service, Washington, D. C., or the Engineer, Glendive, Montana. THOS. RYAN, Acting Secretary. 14-4t

WALNUT LANE BRIDGE.

Department of Public Works.
Bureau of Surveys.
Office 416 City Hall.
Philadelphia, April 20, 1906.

Sealed Proposals, endorsed "Bids for Walnut Lane Bridge," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock, noon, on Tuesday, May 15, 1906, for Schedule A, Walnut Lane Bridge.

Plans for the above work will be exhibited in the office of the Bureau of Surveys, Philadelphia.

Specifications and blank forms upon which bids must be made, will be furnished upon application to the Chief Engineer, Room 416 City Hall.

Bidders must be skilled and regularly engaged in the class of work bid for.

No bid will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

THOMAS L. HICKS,
17-3t Director.

ADDITION TO SUPERINTENDENT'S RESIDENCE.

Central Islip, N. Y.

Sealed proposals, suitably endorsed on envelope, for construction of an addition to superintendent's residence (heating, plumbing and lighting not included), Central Islip State Hospital, Central Islip, N. Y., will be received up to 3 o'clock p. m., on the 2d day of May, 1906, by the State Commission in Lunacy, at the Capitol, Albany, N. Y., when bids will be opened and read publicly.

Drawings and specifications may be consulted and blank forms of proposal obtained at Central Islip State Hospital, Room 8043-44, Metropolitan Bldg., N. Y. City; or by application to G. L. Heins, State Architect, in the Capitol at Albany, N. Y.

Contracts will be awarded to the lowest responsible and reliable bidders unless the bids exceed the amount of funds available therefor, in which case the right to reject all bids is reserved.

T. E. McGARR, Secretary,
State Commission in Lunacy.
Dated Albany, N. Y., April 16th, 1906. 17-1t

HIGHWAY BRIDGES.

Niagara Falls, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Niagara Falls, N. Y., until 8 o'clock p. m., May 15th, 1906, for the construction and erection of a steel truss highway bridge of 164 foot span and a width of 65 feet.

Sealed proposals will also be received at the same time for remodeling and erecting one old highway bridge of 141 foot span and 30 feet in width.

Plans and specifications may be seen and bidding sheets obtained at the Office of the City Engineer in the Convention Hall.

All proposals must be made upon blank forms furnished by the City Engineer.

All proposals must be based upon plans and specifications covering the work upon file in the office of the City Engineer.

A certified check on a solvent bank made payable to the City Clerk and City Treasurer of the City of Niagara Falls, N. Y., jointly in the sum of $3,000 shall accompany the bid for the new structure.

A similar check in the sum of $500 shall accompany the bid for remodeling and erecting the old structure.

The Board of Public Works reserves the right to reject any and all bids and to waive any informalities.

WALTER P. HORNE, City Clerk.
17-2t W. W. READ, City Engineer.

SIDE WALKS.

Ogdensburg, N. Y.

The Board of Public Works of the City of Ogdensburg, N. Y., invites proposals for the construction of 10,000 yards of concrete sidewalk in accordance with specifications on file in the office of city clerk, where copies of said specifications may be had on application. Proposals to state the price per square foot, and must be filed with the city clerk on or before May 7, 1906.

The Board reserves the right to reject any or all bids.

Board of Public Works.
By D. J. CRICHTON, JR.,
17-2t City Clerk.

TRANSMISSION LINE POLES.

Sanitary District of Chicago, Ill.

Sealed proposals, addressed to the Board of Trustees of the Sanitary District of Chicago, and indorsed: "Proposals for furnishing Transmission Line Poles along the right of way of the said Sanitary District to the City of Chicago," will be received by the Clerk of the Sanitary District of Chicago on the 15th floor of the American Trust & Savings Bank Building, northeast corner Monroe and Clark Streets, Chicago, Ill., until 12 m. (standard time) on Wednesday, the 13th day of June A. D., 1906, and will be publicly opened by the said Board of Trustees at a meeting held that day.

Each bid must be accompanied by a certified check or cash to the amount of five (5%) per cent. of the aggregate proposals submitted.

Bids will be received on two classes of poles, metal and wood, each class of poles to be as described in the specifications, the district reserving the right to adopt either type of pole.

All certified checks must be drawn on some responsible bank doing business in the City of Chicago, and shall be made payable to the Clerk of the Sanitary District of Chicago. Said amounts deposited with bids will be held by the Sanitary District until all of the respective bids for said work have been canvassed and the contracts awarded and signed. The return of said checks or cash to the bidders to whom the award of said work shall be made shall be conditioned upon their appearance within ten (10) days after receiving notice of such award with bondsmen and executing a contract with the Sanitary District for the work so awarded to them or each of them, and giving a bond satisfactory to the Board of Trustees for the performance of the work contracted for in amounts equal to fifty (50%) per cent. of the contract price noted in the proposal.

All proposals must be on blank forms furnished with the specifications, enclosed in blank envelopes and endorsed "Proposals for Transmission Line Poles." All specifications must be returned with the proposals.

No bid will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his experience and ability in this class of work and his financial ability to prosecute said contract in case the same shall be awarded to him.

Proposals must be made in accordance with the plans and specifications, which are on file in the office of the Chief Engineer, Room 1010 Security Building, Chicago.

Contractors are required to state in their bids their individual names and places of residence in full.

The Board of Trustees reserves the right to reject any and all bids.

SANITARY DISTRICT OF CHICAGO.
By ROBERT R. McCORMICK,
President of its Board of Trustees.
Attest:
I. J. BRYAN, Clerk.
Chicago, April 10, 1906. 17-1t

15 TONS PIG LEAD.

Youngstown, O.

Sealed proposals will be received by the Board of Public Servite of the City of Youngstown, Ohio, until 12 o'clock noon, Thursday, May 3d, 1906, for 15 tons of pig lead.

Specifications may be seen and had at the office of the Board of Public Service.

Bids shall contain the full name of every person or company interested, and accompanied by a sufficient bond or a certified check of $500, that, if the bid or any part thereof is accepted, a contract will be entered into and the performance of it properly secured.

The Board of Public Service reserves the right to reject any or all bids.

By order of the Board of Public Service.
G. T. PROSSER,
17-1t Clerk.

OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., April 9, 1906.—Sealed proposals will be received at this office until 12 o'clock, noon, April 30, 1906, for furnishing and delivering sluice gates for the sewage disposal system, D. C., f. o. b., Washington, D. C. Specifications and forms of proposal may be obtained at this office. HENRY B. F. MACFARLAND, HENRY L. WEST, JOHN BIDDLE, Commissioners, D. C. 16-2t

ENGINEER OFFICE, U. S. ARMY, Wilmington, Del., April 14, 1906.—Sealed proposals for dredging Mispillion River, Del., will be received at this office until 11 A. M., April 30, 1906, and then publicly opened. Specifications, etc., furnished on application to this office. C. A. F. FLAGLER, Capt., Engrs. 16-2t

PAVEMENT.

Woonsocket, R. I.

Proposals will be received by Stephen Magown, Chairman of Committee on Streets and Bridges, until four (4) o'clock P. M., Wednesday, May 9, 1906, for laying stone block pavement on Railroad Street, from Main Street to Arnold Street.

A certified check for Five Hundred ($500) Dollars must accompany bid.

Specifications may be seen at the office of the City Engineer.

The right to reject any or all bids is expressly reserved as the interests of the City may appear.

Committee on Streets and Bridges,
STEPHEN MAGOWN, Chairman.
JOHN J. MEE.
CHARLES E. ANDREWS.
FRANK H. MILLS,
City Engineer. 17-1t

WATER MAINS.

Cape May, N. J., April 18, 1906.

Proposals will be received by the City Council of the City of Cape May in Council assembled on May 4, 1906, at 8 o'clock P. M., in the Council Chamber of the City Hall of the said City, for the construction of a part of its water supply system in accordance with the plans and specifications therefor, which can be seen on file in the office of Recorder of said City.

The work will comprise the construction of about 9,150 lineal feet of cast iron water main with the fire hydrants, valves and specials thereto appertaining and taking up and delivering about 975 feet of old cast iron water mains.

Copies of the plans and specifications will be loaned to intending bidders by the Recorder of the City of Cape May, upon application by mail or in person, at a charge of $5 for a set, which will be refunded upon the return of said plans and specifications within thirty days after the letting. Any other information desired, in accordance with the said specifications, may be obtained from DeWitt D. Barlow, City Engineer, at his office, in Cape May, N. J.

The proposals must be made in strict accordance with the plans and specifications and upon the proposal sheet, must be sealed, and delivered to said City Council at the time and place specified, and at no other time and place will any proposal be received.

Upon receipt of the proposals the same will be publicly opened and their contents announced in the presence of such of the persons bidding or their agents as may choose to be then and there present, and record of the terms and prices will be made in the minutes of said City Council.

The details, form of proposals, provisions and conditions subject to which the proposals must be made and will be received are shown in said specifications, notice and instructions to bidders.

S. F. WARE,
President of Council.

Attest:
JOHN W. THOMPSON,
Recorder. 17-1t

FORT MONROE, VA., April 21, 1906.—Sealed proposals, in triplicate, for furnishing and installing wire door and window screens in 30 sets bachelor quarters, three double sets officers' quarters, the Post Exchange and Gymnasium Building, seven double sets non-commissioned officers' quarters, the Q. M., Office and Commissary Storehouse, at Fort Monroe, will be received at the Office of the Constructing Quartermaster until noon, May 12, 1906. The United States reserves the right to accept or reject any or all proposals or any part thereof. Information furnished on application. Bids should be plainly marked as such on the envelope or outside wrapper. Address Captain R. H. C. KELTON, Q. M. 17-3t

SITUATIONS OPEN

FROG AND SWITCH DRAFTSMAN. One familiar with all the details of the work. State experience, age, married or single, salary expected, and when he can report for work. Address "S. A. 17," Engineering News, New York. 17-1t

STRUCTURAL DRAFTSMAN thoroughly capable of laying out, detailing and checking. State experience, age, married or single, salary expected, and when he can report for work. Address "W. A. 17," Engineering News, New York. 17-1t

WANTED.—Mechanical engineers and first-[illegible] draftsmen with experience in designing for general railroad work. State [illegible] particulars, also salary required. Address "X. A. 17," Engineering News, New York. 17-1t

CONTRACTING FIRM of high standing wants draftsman, technically educated, familiar with structural steel and heavy timber work; $1,200 per year to start with; state reference, experience, education, age, etc. Address "Z. A. 17," Engineering News, New York. 17-1t

WANTED—A good, accurate detailer and checker for highway bridge and structural work; also a first-class man for making templets and laying out work. Address MEMPHIS BRIDGE CO., Station G, Memphis, Tenn. 16-2t

DRAFTSMEN AND CHECKERS WANTED on structural steel work for buildings. Apply by mail only, giving age, nationality, education, experience and salary expected (signed) POST & McCORD, 41 E. 23d Street, New York. 17-2t

WANTED—Mechanical draftsmen of experience and ability for blast furnace, open hearth and general rolling mill work. Position permanent for satisfactory men. State age, experience and salary desired. CAMBRIA STEEL CO., Johnstown, Pa. 17-12t

CIVIL SERVICE EXAMINATIONS—NEW YORK STATE.

Examinations will be held for the New York State service as follows:

May 12, 1906.
Assistant Sanitary Engineer, $5 a day when employed.
Bridge Draftsman, $1,200 to $1,500.
Consulting Sanitary Engineer, $3,000.

May 26, 1906.
Assistant Civil Engineer, $5 to $6 a day.
Bridge Designer, $1,500 to $1,800.
Civil Engineering Draftsman, $4 to $5 a day.
Junior Bridge Draftsman, $900 to $1,200.
Leveler, $4.50 to $5 a day.

For further particulars and application blank address

CHIEF EXAMINER,
State Civil Service Commission,
17-2t Albany, N. Y.

WANTED—High-grade engineering salesman to manage a department for well-known machinery house in New York; fine opportunity and attractive salary for man of exceptional ability who can show results; must be thoroughly familiar with the territory and be in position to invest from $2,000 to $5,000; in writing give full details as to previous record and present salary and position. Address "B. B. 15," Engineering News, New York. 15-tf

WANTED.—Six competent structural draftsmen and two checkers on bridge and structural steel. Shops 300 miles from New York. State age, education, experience, and salary. Address "B. A. 16," Engineering News, New York. 16-2t

WANTED.—At once several structural and ornamental draftsmen. HINKLE IRON CO., 534 West 56th St., New York. 17-1t

WANTED.—A thoroughly competent experienced estimator of structural and ornamental iron work, permanent position at good salary will be paid to reliable man having the necessary experience and qualifications. Reply by letter only, giving experience, references and salary expected. THE ESTIMATING BUREAU (Inc.), 110 West 34th St., New York. 17-1t

WANTED—Architecural draftsman, experienced, rapid and accurate; permanent position to right man. Apply by mail only, sending samples of work if practicable. Address UNIT CONCRETE STEEL FRAME CO., 1413 Commonwealth Bldg., Philadelphia, Pa. 15-tf

WANTED.—General foreman for large shop making special machines; only high-class, practical, experienced man of executive ability, who is holding similar position will be considered; requires man fully capable of handling 300 to 400 men; state if experienced in foundry work; excellent opportunity. All communications will be held strictly confidential. Address "S. 15," Engineering News, New York. 15-tf

WANTED.—Mechanical draftsman familiar with steel tank work, general knowledge of pumps, piping, etc., and structural steel work; state age, experience and salary expected. Address ROOM 100, 66 Broad St., New York. 16-2t

WANTED—A man to take an interest in and to invest $10,000, more or less, in a construction company, incorporated in Massachusetts, with a large plant and an extensive business but handicapped by lack of ready money. Address "H. 16," Engineering News, New York. 16-3t

WANTED.—General foreman on mill building construction; must be a hustler and able to get results out of his men. Location, Pennsylvania. Salary, $35 per week. Apply "C. A. 16," Engineering News, New York. 16-3t

WANTED.—A young technical graduate, experienced in the erection of bridges and steel buildings, to prepare plans and take charge of office end of erection work. State education, experience, and salary. Address "A. A. 16," Engineering News, New York. 16-2t

WANTED.—A general building superintendent or manager; prefer man who has had successful experience with prominent architect or construction company in city of size, and who can offer satisfactory references as to integrity; also ability for organization, besides experience in taking off quantities and systematic manner of keeping track of costs and estimates. None but a strong man knowing a building from bottom to top, and who can get the best out of men need apply. State salary. Address "A. A. 15," Engineering News, New York. 15-4t

WANTED.—Architectural draftsman; one with some knowledge of engineering preferred, but must be experienced as an architectural draftsman. Address "P. 15," Engineering News, New York. 15-3t

WANTED—Ornamental draftsman. Do not require man of ancient experience, but prefer young man, naturally artistic and can do freehand filling in and especially good on scroll work. CALDWELL & DRAKE IRON WORKS, Columbus, Ind. 17-2t

WANTED.—Chief engineer [illegible] iron works here. Should be a te[illegible] and mechanical engineer and [illegible] practical mechanic. Must have [illegible] executive ability, office training, [illegible] posted in modern, up-to-date meth[illegible]. Must be a capable salesman, and ab[illegible] direct other salesmen in handling [illegible] lines of machinery, estimating [illegible] and pumping plants, elevator pl[illegible] and various classes of foundry a[illegible] machine shop work. State experience [illegible] references, age and salary wanted. [illegible] BAKER IRON WORKS, Los Ang[illegible] Cal. 17-1t

DRAFTSMAN wanted at o[illegible] a temporary engagement (possi[illegible] permanent). One who has had experi[illegible] in frog and switch work. Write g[illegible] particulars and salary wanted. T[illegible] MANUFACTURING CO., Carlisle, [illegible] 17-1t

WANTED.—Mechanical draft[illegible] who could adapt themselves to railw[illegible] special track work; permanent position[illegible] age, experience and salary exp[illegible] Address all communications to W[illegible] WHARTON, JR., & CO., Inc., Station [illegible] Philadelphia, Pa. 17-1t

WANTED.—Civil engineers [illegible] familiar with trigonometrical and logarit[illegible] computations; those familiar with [illegible] special track work preferred; p[illegible] permanent position; state age, experience [illegible] salary expected. Address all com[illegible] communications to WM. WHARTON, JR., & [illegible] INC., Station D, Philadelphia, Pa. 17-1t

WANTED.—One first-class str[illegible] structural steel work draftsman, $5.04 p[illegible] diem, one second-class copyist archite[illegible] architectural draftsman, $3.04 per diem. A c[illegible] competitive examination will be held for [illegible] above positions May 15, 1906. Fo[illegible] further information address COMMANDANT, Navy Yard, League Island, Pa. 17-2t

WANTED.—Chief draftsman for bridge shop **turning out about 1,200** tons per month **of miscellaneous work. State** fully salary **required, education,** experience, references, **and time you could** report for duty. **Address "Z. A. 16,"** Engineering News, **New York.** 16-2t

WANTED—Draftsman for general work; state experience and salary expected. Address HELENA POWER TRANSMISSION COMPANY, Butte, Montana. 17-1t

Miscellaneous Wants

CAPITALIST or partner with capital wanted to promote a new patent of reinforced concrete construction. Cost one-fourth to one-fifth less than any other system now in use. Arrangement possessing characters of an earthquake proof system at the same time. Happy prospect for the revivification of San Francisco. AJELLO, Astor Court, Room 92, New York City. 17-1t

FOR SALE

FOR SALE
SECOND HAND GOOD AS NEW

1 Smith Concrete Mixer, ½-yard Batch Engine **attached,**
1 25 Horse-power Upright Boiler,
1 12 Horse power Upright Boiler,
1 (3-inch Suction) Pulsometer Steam Pump.

Located near Chatcham, N. Y., on line of **D. L. & W. R.R. Address OWNER,** 39 Sherman **Street, Brooklyn, N. Y.** 17-tf

GRADING OUTFIT
FOR SALE

GRADERS, TRACTION ENGINES, DUMP WAGONS, SCRAPERS, ETC.

All in FIRST-CLASS condition; some almost **NEW. Immediate delivery.**

For particulars apply to

GUARANTEE CONSTRUCTION CO.
MAIN OFFICE 17
72 TRINITY PLACE NEW YORK CITY

FOR SALE

One Vulcan Steam Shovel

with special trench boom attachment; 1½ cubic yards capacity; boom type; **car trucks; weight, 45 tons;** with 45 H. P. **Hoisting Engine and Boiler** complete, **including hoisting and swinging gear. Shovel, although built in 1901, was used only about four months** that year **and two months in 1902, and** not **in use since. "S 17." Engineering** News, **New York.** 17-2t

FOR SALE. CHEAP.

60 Good Second-hand Bridges
20 New (D. P. G.) Bridges
Specifications and Blue Prints on application

17-4t **F. A. JOHANN**
Equitable Building, ST. LOUIS, MO.

NOW READY

THIRD EDITION OF

SMOLEY'S TABLES

GREATLY ENLARGED

Parallel Tables of Logarithms and Squares

of Feet, Inches and Fractions of an Inch from 0 to 50 feet, advancing by 1-32 of an Inch, and from 50 feet to 100 feet, advancing by 1-16 of an Inch. Angles and Logarithmic Functions Corresponding to given Bevels, and Other Tables.

By CONSTANTINE SMOLEY, C. E.

The success achieved by the previous editions of this work has encouraged us to have the Tables extended to 100 feet, thus greatly increasing the value of the book.

The Tables of Angles and Logarithmic Functions, corresponding to given bevels, inserted in this edition, has many uses such as:

1. Offering an exact and rapid solution of a right-angle triangle when given by the bevel and one of its sides.
2. The bevel or slope can be read directly from the angle expressed in degrees, minutes, etc., or *vice-versa*.
3. The bevel can be obtained from the hypothenuse and one of the sides of the triangle without first figuring the other side by means of the table of squares.

Flexible leather, 5 x 7 inches; 331 pages, 5 sets of tables
8 pages of explanations and typical examples
Price, $3.00, net

The Engineering News Publishing Company
220 Broadway, New York

CONSTRUCTION
Plans and Sp
List of Cont
Railways
Electric Rai
Light and P
Bridges
Buildings
Water Supp
Sewerage
Streets and
Manufacturi
Miscellaneo
U. S. Poss
Mexico
Contract P
READERS' W
CIVIL SERVI
INDUSTRIAL
TRADE PUB
PROPOSALS

C

PLANS A

The followi
ding Sheets (
gineering Ne
York:

Bids
close.

May
4—Wharf
4—Sewer c
*7—Sanitary
*8—Tunnel,
8—Sewers.
8—Barge c
*10—Dam..B
*14—Caisson
*14—Dredgin
*15—Bridges
*15—Bridge
*15—Bridges
*21—Rebuild
*24—Canal.

June
9—Concre

Sept.
15—Hotel

*Work ad

LIS

Bids
close.

LIC

May 3.Fe
May 4.El
May 8.El
May 15.L
May 28.El
Adv
June 1.He

June 1.L
June 1.El
A
June 13.T

July 5.W

May 3.S
May 5.
May 5.
May 7.
May 7.
May 7.
May 7.
May 7.S
May 7.T
May 8.
May 11.
May 12.
May 14.

May 15.
Adv
May 15.
Ad
May 15.
Ad
May 15.
May 16.
May 17.
May 17.
May 19.
May 19.

May 22.
May 25.
June 30.

May 3
May 4

May 4
May 7
May 7
May 7
May 8
May 8
May 8